JOURNAL OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS

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PAVLOVSK (1796-1808). SALLE DE MALACHITE BY CHARLES CAMERON
(see pp. 961 to 973)

from *Historical Survey of St. Petersburg and its neighbourhood. Part 6.* (*Moscow, 1912.*)

JOURNAL OF THE

ROYAL INSTITUTE *of* BRITISH ARCHITECTS

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Journal

SCHOOL BUILDINGS

From time to time the profession's conscience turns to concentrate on some national architectural problem. At one time it will be housing, at another the preservation of some monument or a problem of town or country planning. Now it is school building. The chief impetus comes from the Government's proposal to raise the school age to fifteen years, which in the course of the next three years will necessitate a vast programme of school building throughout the country. A secondary influence is the general acceptance of the principles laid down in the Report of the Consultative Committee of the Board of Education, which, under the chairmanship of Sir Henry Hadow, emphasised the advantages of dividing education into "primary" and "post-primary" stages with entirely separate schools for infants, juniors, or for infants and juniors and for seniors. These two facts in our educational history are perhaps symptoms only of a wider interest that is now being shown in juvenile education throughout the world.

Early in July the Board of Education produced a booklet of *Suggestions for the Planning of Buildings for Elementary Schools* which must be one of the most completely excellent handbooks of architectural advice that has ever been issued by a Government office. Mr. E. G. Kendall, Chief Architect to the Board, and those associated with him in the production of the *Suggestions*, deserve the thanks of the whole profession for their open and intelligent approach to a subject of considerable complexity. The suggestions, partly because they are suggestions and not regulations, provide exactly what was wanted. They state clearly and without prejudice what is current "best practice" and what are regarded as minimum requirements, but carefully imply that the minimums are standards to be exceeded if possible, and that the present ideas "do not constitute a final stage in school development."

Members may remember that some weeks ago the suggestion was made by a member of the Government that a competition should be held open to the whole profession to find "ideal" school designs which could serve as the basis of future school building. The suggestion was heartily welcomed at the time by Mr. Berry Webber, chairman of the R.I.B.A. Competitions Committee, and there is reasonable hope that the competition may be held in due course. As a preliminary those members of the profession who are interested should certainly obtain the Board's *Suggestions* (two shillings, net, from the Stationery Office or its agents), and should, too, endeavour to consult some of the excellent articles that have appeared in the professional papers,* and make continual reference to the JOURNAL's Review of Periodicals, in almost every number of which are notes on recent school buildings.

It so happens that among the theses recently submitted in the Final Examination was one by Mr. J. Greenwood, a student of the R.I.B.A., with several years' experience in the office of a local education authority. In response to the general desire for information on school building it had been our intention to publish Mr. Greenwood's thesis, which contained by far the most complete statement of experience on the subject that had yet come to our notice. When, however, the Board's own suggestions were published it was evident that since, in general, Mr. Greenwood dealt with the subject on similar lines to those followed in the official report, the publication of a further treatise was unnecessary. Our decision not to publish the thesis was taken with considerable regret, particularly because it was one of the best and most thorough theses on a technical subject submitted in recent years. It may, however, be seen in the library.

* Notably, *The Architects' Journal*, Schools number, 28 May 1936. *L'Architecture d'aujourd'hui* (Paris), Schools number, May 1936. *Architectural Record* (New York), Schools number, June 1936.

Architects and Air-raid Protection

The Report of the General Meeting on 22 June, when Colonel W. Garforth, D.S.O., M.C., spoke on the subject of air-raid protection, was unavoidably delayed, but we are now able to publish it. It will be found on page 985.

Overcrowding

The Ministry of Health Report on the Overcrowding Survey in England and Wales, 1936, is in some ways the most important housing document ever issued in this country. As the first reliable census of housing ever to be made it represents the first wholehearted attempt to tackle a social problem nationally by preceding action by research. The Ministry, the local authorities and the occupants of the houses surveyed all can be praised for the manner in which they have co-operated in a work full of difficulties. The Ministry particularly deserves praise for the admirable presentation of the Report.

Dwellings numbering 8,924,523 were inspected, and of these 341,544, or 3.8 per cent., were overcrowded within the meaning of the Housing Act. The tables are divided showing the overcrowding in Administrative Counties, in County Boroughs and in London. In the first the percentage of overcrowded dwellings is 2.9 of those surveyed. In the County Boroughs the average is 4.2, ranging between Sunderland, where 20.6 of the houses surveyed were overcrowded, and Bournemouth with a percentage of 0.3. In London the average is 7 per cent., with Shoreditch 17.2 per cent. and Woolwich (rather surprisingly) 1.7 per cent.

In a memorandum issued by the Ministry in 1935 it was stated that the standard " does not represent any ideal of housing, but the minimum which . . . is tolerable while at the same time capable of immediate or early enforcement." The situation, even in the terms of the low standard set, is serious enough to make us uneasy. The 1935 standard was based on the assumption that the living room in a working-class house can be used as a bedroom, but as the report issued by the City of Leeds pointed out, " only on the rarest occasion is the living room in a working-class dwelling used for sleeping, and there is no reason to believe that this practice will be varied in the future. The effect will be that a number of houses will still continue to be overcrowded, both on a numerical and a sex standard, with the apparent condonation of the local authority."

If a more generous standard had been adopted there would be, according to the Ministry's Report, 853,000 overcrowded families instead of 341,000 as under the existing standard. In Leeds, for instance, where a higher local standard already exists, the percentage overcrowding would be not 3.27 but 21.13. In the opinion of many it would have been better to have stated a standard nearer the ideal at the start. The best that can be said is that in general the existing standard has defined a problem which is capable of solution in the near future. As such it is one step in the right direction. It is difficult to estimate accurately the number of houses required to relieve overcrowding since much can be done by the redistribution of families, but the Ministry puts the figure at 200,000. (If the higher standard had been set the number would be about 500,000.)

The R.I.B.A. Film

The picture at the foot of this page is a " still " from the Gaumont-British film of the R.I.B.A. which has been prepared under the auspices of the Film Sub-Committee of the R.I.B.A. Public Relations Committee. It shows the President seated in the debonair surroundings of the Gaumont-British sound-recording studio, about to start his running commentary on the pictures which follow of the Portland Place building.

It will be shown as part of a " G.-B. Magazine," the first part of which is a documentary film of Steyning, in Sussex, followed by pictures of a series of models illustrating the development of English house building. Then comes the R.I.B.A. The first exhibition will be at the Tivoli Cinema (probably), in the Strand, on 7 September. Then, from the 14th, at the Tatler News Theatre, in Charing Cross Road. The general release will be on 21 September. As far as possible we shall try to keep members informed of the various places in which it is being exhibited so that they and their friends can go, both for their own entertainment and also to show the Gaumont-British Company that the profession appreciates its enterprise.

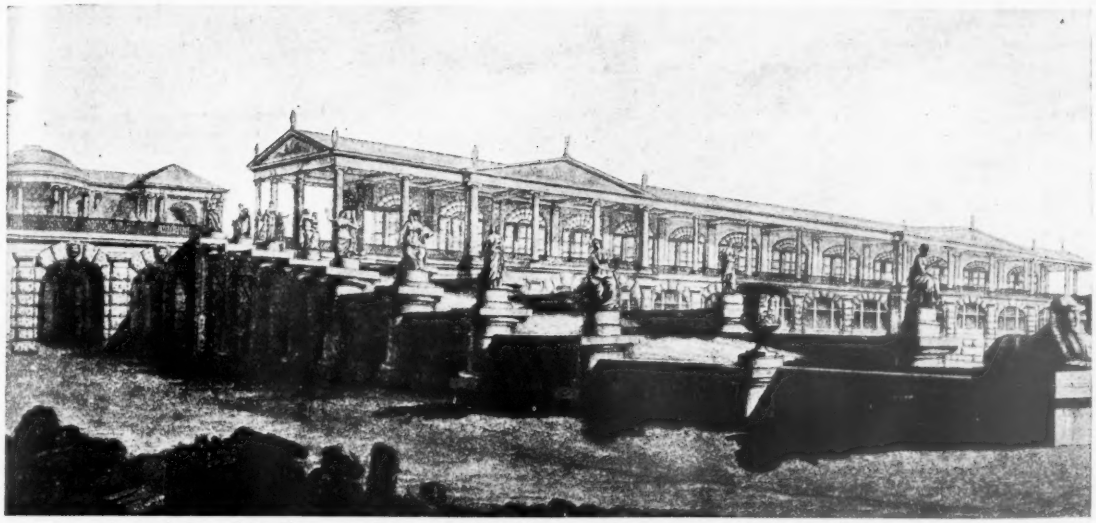


Fig. 1. General view of the *Kameronova Galereja*, *Pavilion d'Agathe*, and *Pent-Dance* at Tsarskoje Sélo, showing certain unbuilt details, including the statues and sphinxes
from *Klassiki Arkhitekturi No. 1. Moscow, 1924*

CHARLES CAMERON

Architect to Catherine the Great of Russia*

By GEORGES LUKOMSKI

We know almost nothing of the childhood of Charles Cameron. What little information we possess about his early life and his mature age is to be found almost exclusively in Russian works. All the literature concerned with the history of English architecture remains silent on the subject. Some encyclopædias devote a dozen lines to him and repeat the same facts and occurrences in his life—that is all. No work, not even an article in a review of art or architecture, has ever been written. In articles in the *Architectural Review*† he is mentioned by Professor A. E. Richardson : other summary accounts mention palaces erected by him, but none of these sources tell us much about him.

There is a portrait,‡ recently found by chance, which, on internal evidence, seems to be of Cameron ; it shows him at the age of 30 or 35. But what exactly he had been doing up to that date, above all, when he began his studies and why he took up architecture, remain unknown. However, the period which follows 1777 is more or less known. We know that he had left for Russia at the invitation of Catherine the Great, who had been impressed by his work on the *Baths of the Romans*, which had been published at this time.§ Catherine's attention had been drawn to the work by Grimm, her " ambassador of art " in Europe, and it is Grimm's correspondence, edited by M. L. Réau, with the Empress which gives us some details about his work at Tsarskoje Sélo and at Pavlovsk, which were imperial and grand-ducal residences near St. Petersburg. But there is no mention of other works. Even in Russia nobody knew. It was only in 1912 that the plans for the palace at Baturin (department of Chernigov) were rediscovered, though we do not know why, being in the service of Catherine and the Grand Duke Paul, Cameron agreed to draw up the plans for a building so far from the capital (2,000 km. from St. Petersburg, 1,400 from Moscow). This palace had always been ascribed to

* Translated from the French by Denise Hermann and Evarts S. Scudder.

† Vol. 38 (1915) p. 87. Vol. 39 (1916) pp. 19, 50, 95.

‡ Painted by R. Hunter 1773, and belonging to Mr. D. Minlore, published by me in the *Connoisseur*, March 1936. G. L.

§ *The Baths of the Romans explained and illustrated. With the restorations of Palladio corrected and improved.* &. fo. London 1775. An edition in French was published in London three years earlier, in 1772. A copy of each edition is in the library of the R.I.B.A.

Giacomo Quarenghi, with no reason whatever as one now sees.

After Catherine's death Cameron fell into disgrace. His works and his talent had aroused the jealousy of intriguing architects, and it is remarkable that among these ungrateful people was his assistant V. Brenna, who had collaborated with him at Pavlovsk.

The years from 1805-1806 until his death, presumably in 1811, are blank. It is not known whether he was still chief architect to the Admiralty, nor when he returned to his own country, nor where he was buried.

The Neglect of Cameron

The neglect in almost all biographies and histories, both of his own time and after, is quite characteristic. Charles Cameron was a great and remarkable architect, worthy in the author's opinion of a place beside the Adam brothers; as a constructive architect he surpassed even the genius of John Soane and Vanbrugh, and is worthy to be considered as Chambers's successor. He was, in fact, one of the greatest English architects. But by leaving his country he became completely forgotten, and his punishment at the hands of English opinion has been hard. His jealous compatriots failed to understand that, having found, as it were by chance, an outlet for his activity, a favourable environment for the creation of his work at the hands of the rich Empress—who, moreover, was a woman of taste—he had discovered the chance of realising his ideal. They thought that the glory of English architecture would suffer from the fact that Cameron built in a foreign country. In fact, although he had ceased to attract the attention of his compatriots, he none the less served the cause of English art from 1780-1810, for he succeeded in playing a big part in Russia for a decade. It was through his influence that English art was introduced there, although it is true that he did not create a "school."

Then, why such neglect? In Russia, where he only lived for a short while, his name will not be forgotten for centuries, for a part of the building constructed by him at Tsarskoje Sélo is called *Kameronova Galereja* —a notable example of a work bearing the name of its architect.

One incidental reason, perhaps, for neglect is due to the tendency of people in Western Europe to be interested only in the bizarre aspects of Muskovite art of the 15th, 16th and 17th centuries, rather than to realise that there was a great artistic movement in favour of the Classic after the introduction of the Baroque by the Dutch under Peter I, and by the French and the Germans after 1700.

The portrait by Hunter showing Cameron dressed in a fantastic and slightly extravagant costume in the old Russian style goes to prove the truth of this. Possibly before leaving for Russia, which had already aroused his curiosity, Cameron himself had a similar idea of the habits, costumes, styles and state of the fine arts of that country. This costume shows us what a false idea existed at the time about Russia. Besides, the same general ignorance exists to-day; not all people are aware of the return to the Classic which began in 1931-32 in Soviet Russia, and are inclined to believe that the international style still predominates—the style of Le Corbusier, Loos, Lurçat or Mendelsohn.

Portrait by R. Hunter (1773) assumed to be of Charles Cameron. On the drawing in the painting are the words ". . . sett of Baths." In pencil on the back of the canvas it is stated that the portrait is of Lord Bulte's [Bute's?] agent. The portrait came from the Townshend Collection, Raynham Hall, Norfolk, and is at present in the possession of Mr. David Minlore, by whose permission it is reproduced

Even after this period of Classic renaissance (eclecticism invaded everything from 1840-1900), there was no interest in England for anything except Russian "folk" art. At the great exhibitions the Russian pavilions were always distinguished by their outmoded native character, and Russian architecture continued to be conceived in terms of the architecture of the 15th to 17th century.

Catherine the Great's Palace at Tsarskoje Sélo (1798-9). The *Kameronova Galereja* from a photograph taken in 1918

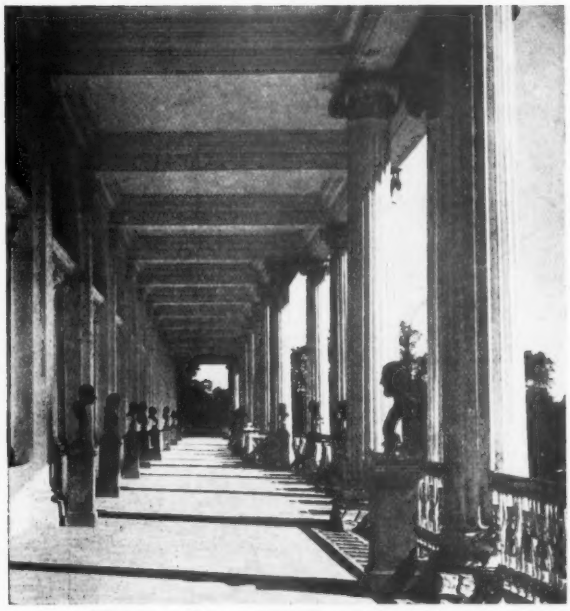
There has been a similar neglect in France of the great French masters of Russian classicism Vallin de la Mothe and Thomas de Thomon and of the Italians Quarenghi, Rinaldi, Rusca in their country. (Quarenghi, perhaps, who published his plans at Mantua, may be excepted). It is only recently that certain works have given us any light on this subject.* But in England not a single work exists on the spread of English style, English culture, or English architecture abroad. Without doubt one could do research work in Russia which would reveal other English influences besides Cameron's. Important gardens, for example, were designed not as tradition dictated, according to the French or Italian, but according to the English style—like Peterhoff, which was projected by Leblond, and one or two residences in the provinces, like the gardens of the palace at Pavlovsk, or those of Alexander at Tsarskoje Sélo (Anglijski Park), like the gardens of Oranienbaum, and those of certain noble country houses built under the influence of Cameron, who had married the daughter of the celebrated gardener Bush.

It is true that these works, these marvellous palaces and gardens, had been built at a great distance. There was little exchange of views between the two countries, no newspapers existed as means of rapid communication as they do to-day ; besides there was this prejudice in England of ignoring what success an Englishman might achieve abroad. But at least it should be known where the original drawings are—the sketches made by Cameron at the period when he was still a student. It is to his descendants and relatives that we address this reproach.

A Few Facts and Influences

The date of Cameron's birth is probably about 1740 : the country of his birth, Scotland. He was devoted to the architectural ideals of Stuart. The opening of his career, his first studies, the motives which led him to choose the career of an architect remain unknown. One assumes that Clérisseau was his first master—but where ? At Paris ? Did he remain long in that city ? Then he departed for Italy and devoted himself to a

* L. Réau : *L'expansion de l'art français*. Ed. Laurens. E. Lo Gatto : *Il genio italiano al estero*. V. 4. Gli architetti.



TSARSKOJE SÉLO. *Kameronova Galereja (1917)*

study of the Roman Baths. It was during the reign of Pope Clement XII that he undertook the archæological researches on the Imperial Baths. Among his contemporaries he was known as the chief inheritor of Palladian ideas.

Undoubtedly among the influences that helped to form his taste the following can be mentioned : the work on Palladio published by Lord Burlington, and the works of Vanbrugh, Kent, Chambers, Robert and James Adam, and Payne. The only exact information we have on his life is that he took part in the Exhibition of the Free Society in 1767, and in the Exhibition of the Society of Artists in 1772. It is there that we find his projects for the reconstruction of the Baths of Caracalla.*

He became more widely known by his work the *Baths of the Romans*—a work in which, beside his own designs of Roman ruins, he put designs of Palladio and Piranesi, as well as descriptions of the ancient authors. However, it is necessary to point out that although his designs were influenced by Palladio's preceding work he brought a new light and precision of his own to them. But we cannot consider this work on the Baths as really original—we must consider it as inspired by Palladio.

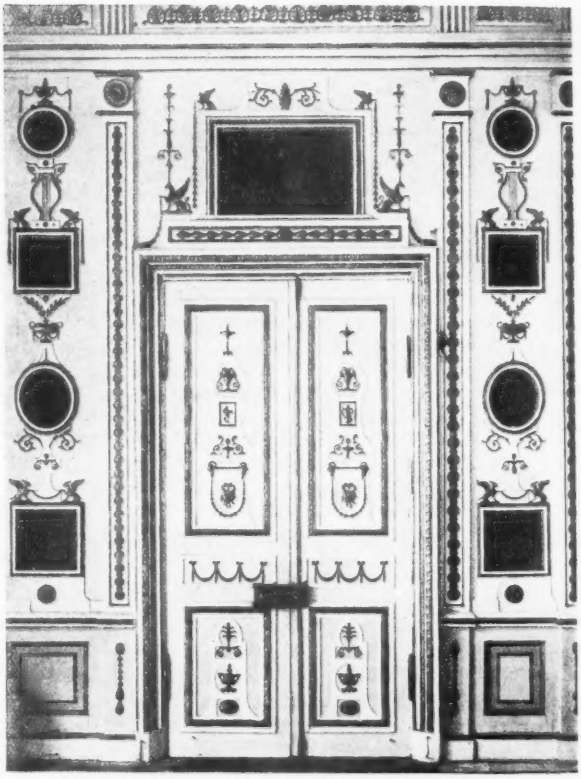
What did he do on his return to England ? We know nothing. Probably he was occupied with his book. But did he build anything ? Our researches have given us no results concerning this. We know that he lived in London in an aristocratic quarter where houses in the classical style were being built, probably Piccadilly not far from Egremont House.

We do not know whether he published his work at his own expense or whether he received help from Lord Bute. The latter supposition is plausible, as he dedicated the book to him.

CAMERON IN RUSSIA

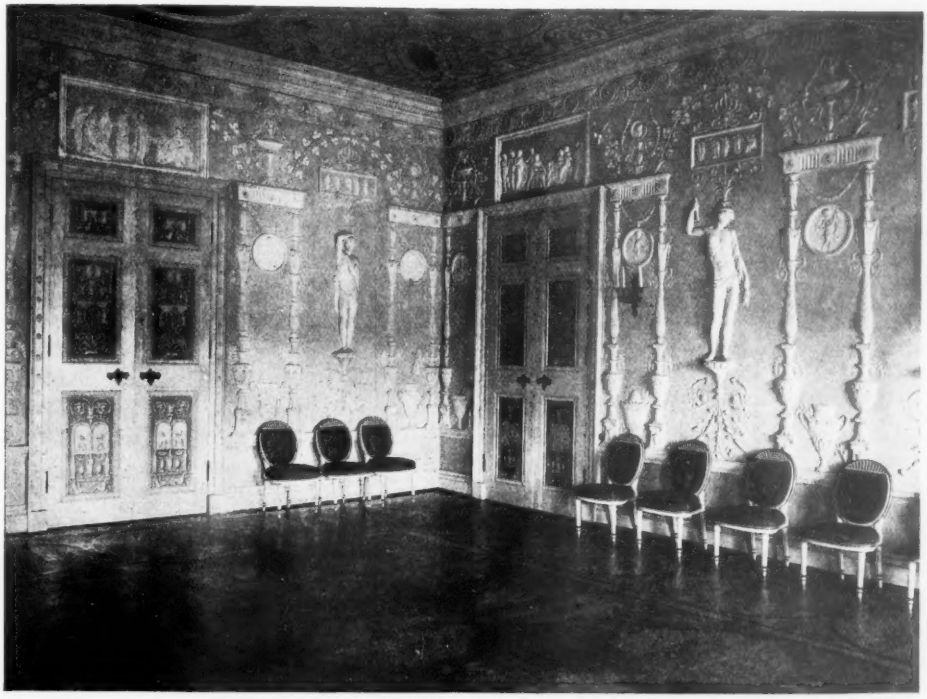
On Grimm's recommendation Cameron and Quarenghi were invited to go to Russia. Information on this subject can be found in Catherine's correspondence, but details of the trip and the exact date are completely lacking (1778 or 1779).

From the outset he had the confidence of the Empress, but he did not find the same sympathy among his colleagues, perhaps because of his ignorance of Russian or an English attitude of superiority. But on the other



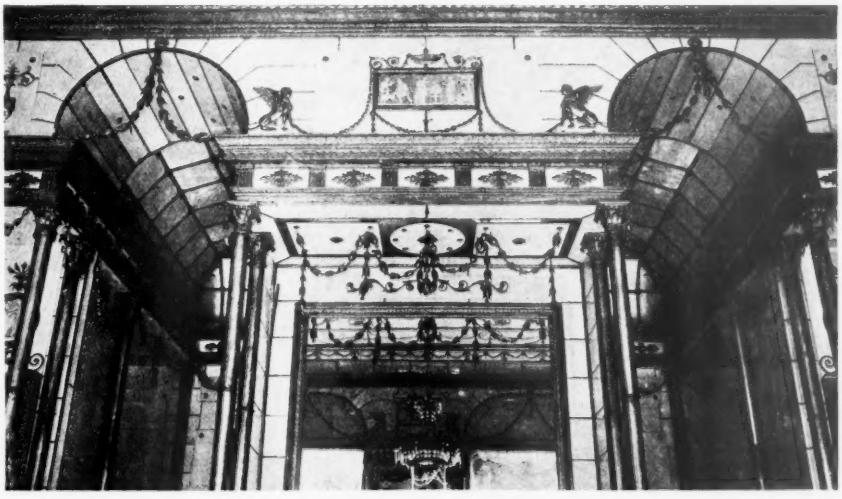
TSARSKOJE SÉLO. A doorway in the Empress's boudoir

* That is all we find in Nagler, Füssli, Redgrave, Thieme, Decker —and the same facts are repeated in the dictionaries and lexicons, French and English.



Above. TSARSKOJE SÉLO. The dining room in the apartments of Elizabeth Alexéievna. The first room carried out by Cameron in the Palace. The ceiling was damaged in the fire of 1830 and was repaired by the architect Stassoff

Below. TSARSKOJE SÉLO. The Empress's bedroom (porcelain, glass and bronze).



hand there is nothing in his character to indicate this—he was said to be very modest and agreeable.

However, when he asked for admission to the Society of Academicians he was refused it with the excuse that it was not sufficient to have made the model of a church (St. Sophia at Tsarskoje Sélo) ; and the Society added that they would wait until he had realised other projects before deciding to confer this honour on him.

Some Works

He was entrusted with many works under Catherine which we will describe later. But in 1786-1787 it was Brenna who became general director of the works at Pavlovsk—Brenna who had been his adjutant since 1781. Cameron remained at Tsarskoje only as a simple architect.

Only three weeks after Catherine's death Cameron was relieved of his functions—and in a manner that was far from correct. But we do not know why. Perhaps it was because Küchelbecker, the administrator at Pavlovsk, had been out of sympathy with him for a long time. He disapproved of Cameron's slowness, of the too costly way in which he proceeded with the execution of his work. But the Grand Duke Paul urged him to hurry, and made him responsible for the success of the enterprise. Küchelbecker, who had a long correspondence with the Grand Duke and the Grand Duchess (then travelling in Europe under the name of Comte and Comtesse du Nord), had never allowed Cameron to be too particular in the choice of his materials, or too exacting in the quality of the workmanship.

Immediately after coming to the throne Emperor Paul dismissed Cameron. We know from some notes which were found in the archives of Count Scheremeteff that Cameron sold his collection of books to Paul Argounoff. Why did he sell them so long before he left Russia in 1811-1812. If he sold his books some time about 1791-92 he must have been already in pecuniary difficulties. How did it happen that during this period of great activity he was in need of money ? One knows that there is nothing more painful for an architect than to deprive himself of such indispensable documents.

After Pavlovsk he left Tsarskoje Sélo also. He was occupied with projects for different private people. According to the archives we know that he executed a plan for the Count S. R. Vorontsoff, and that it was Besborodko who had recommended him. He was also occupied with the palace of Baturin for Count Rasumovski. It was, in fact, probably to Baturin that he went after being dismissed from Pavlovsk. We know that he left Baturin in 1800 for a journey to England.*

But on his return from England he was favoured by Paul I, and appointed architect to H.M. Cabinet. Three of his adjutants were given back to him. At this period he drew up a plan for the gateway to the Zoological Gardens of Tsarskoje. Strangely enough he returned to Pavlovsk to build the pavilions of the gardens.

In 1802, at the suggestion of the Vice-Admiral, he was nominated chief architect to the Admiralty with a salary of 1,500 roubles (£150) a year, a sum proposed by Cameron himself. He began the hospital and the barracks at Kronstadt. What a come-down after having built palaces for an Emperor, and so many other monuments ! But this time Cameron laid down conditions ; he wanted to make reports to the Emperor alone. Such was the reason of the difficulties and misunderstandings among the contractors (real robbers, as one knows) and Cameron, who wanted to oppose all dishonest acts. He inspired anything but sympathy among the whole crowd of them, and many of them detested him. Whereupon he took precautions to arm himself against these intrigues, which could become dangerous.

After the fire of 1802 at Pavlovsk he was called upon to undertake some work of reparation. In 1802 he drew up the plans for the Cathedral of Kronstadt and other buildings of slight importance, doorways, annexes, etc., also at Kronstadt and in the provinces, as well as all the administrative buildings of the Admiralty. For an experienced architect these works were of little interest and hardly worthy of his genius. Since 1803 he had encountered new enemies. One of them was the architect Zacharoff, who was nominated in 1805 to Cameron's post. There is a long correspondence about this extending to 1811. It is strange enough to find Cameron again at Pavlovsk, where he was occupied with various administrative buildings. After that we enter the period of absolute obscurity. Not a single document exists that gives any account of his activity. We do not even know whether he stayed in Russia or not. It is probable that he left about 1812, after having sold all his belongings. And soon after he died.

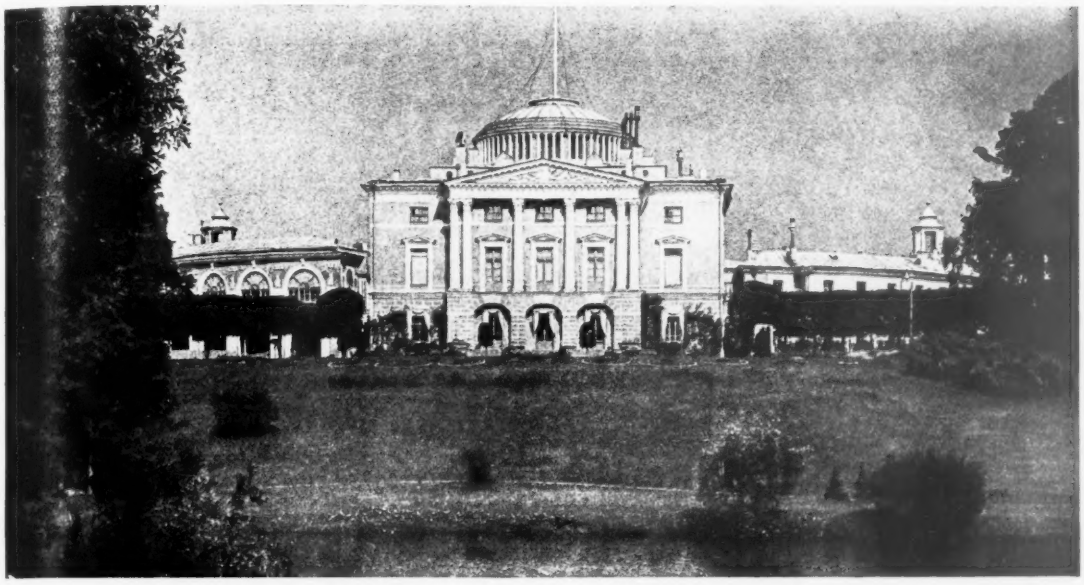
We know that in 1820, after a fire at Tsarskoje, Cameron was looked for in London, but he could not be found, and it was discovered that he was no longer alive.

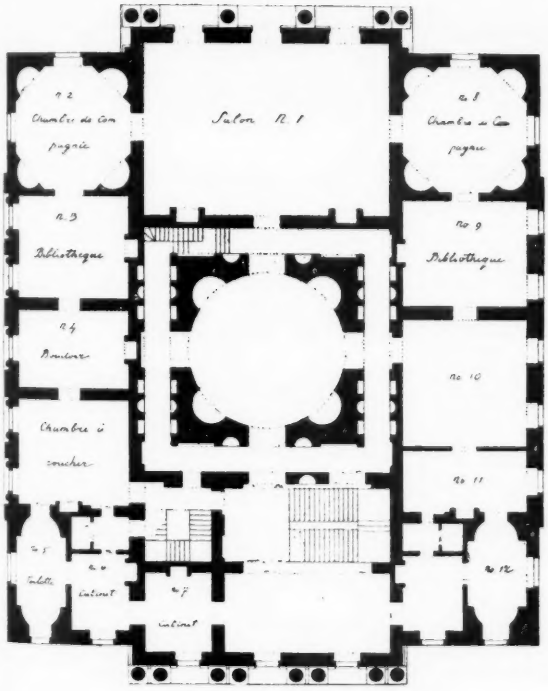
Drawings

Among his designs there are two variants of a great cathedral in the Doric style. Possibly it is the project for the *Kasanskij Sobor* at St. Petersburg. There is also the plan of a palace of three stories with designs for a sloping terrace with rough stone work, possibly a variant of the terrace of Baturin Palace.

The most considerable collection of known Cameron drawings consists of 114 designs which were bought on the instructions of Emperor Alexander I by Prince Lieven, Russian Ambassador in London, for £105 (the sum asked had been £200). They were put in the Hermitage, but they were borrowed tem-

* After so many disappointments in Russia one inevitably asks why did he not remain in his own country.





porarily by Stassoff, the architect who directed the works at the palace of Tsarskoje Sélo after the fire of 1820. In the collection of designs there are many other analogous projects, always in the Doric style, as well as a drawing called "The Ball in the Hall of Columns," and several designs for vases, urns and sarcophagi for the *Kameronova Galereja*. Most of these drawings, which were done a little hastily and with lack of care, are not finished or even signed. A few, however, are admirable: perspectives of the gallery, the Agate Pavilion, for instance. There is a series of drawings in the style of the Adam brothers, which are very well executed and in charming colours. Almost all of them are remarkable for their sobriety. Particularly admirable are the various studies for the *Salles d'Arabesques*, the *Salle de Lyon*, the dining-room, the decoration for the Chinese Village. These are very valuable documents, for they represent the parts of the palace destroyed by the fire of 1820 and reconstructed more or less ably from 1822-1835.

Beside these original sketches of Cameron there are some others which have been preserved in the archives of Pavlovsk and Tsarskoje, as well as in the Museum of Old Petersburg (Anitchkoff Palace). These are signed "Cameron. A.M. Jm-le." There is the project for

PAVLOVSK. A view of the palace from the garden side and *on left* a plan of the central pavilion
view from *Hist. Survey of St. Petersburg, etc.: Pt. 6.*
plan from *Klassiki Arkhitekturi No. 1. Charles Cameron. Moscow, 1924*

an orangery, which is most artistic in spite of its utilitarian purpose. It represents a Doric colonnade, a semi-circular rotunda, a very simple façade with one cornice and lions' heads. The chimneys are hidden by urns.

There are only three insignificant drawings in the British Museum, and one at the Victoria and Albert Museum—this one of a vase with the following inscription " Designed for the Duke of Mantua by Giulio Romano (published accord. to act. 1775)." Also perhaps in the volumes of designs of Charles Louis Clérisseau conserved at the Library of the R.I.B.A. there are some designs which by error have been attributed to Clérisseau, whereas in reality they belong to Cameron. But the resemblance here is so great that it is almost impossible to make a distinction.

In the Historical Museum of Moscow there are also four of Cameron's designs. There is one in the Schwartz collection and one at the National Library ; finally, at the Library of the Institute of Roads and Bridges there is a collection in a beautiful album. On the binding is written " Drawings." This album of designs presumably dates from 1763-1764, and from the time of his Roman sojourn when he was under the influence of Piranesi. One notices a certain imitation of the *Vasi e Candelabri* of this engraver. Urns and vases, candelabra, " arabesques " in the nature of frescoes, Raphael's lodges at the Vatican, furniture, crockery, pottery, everything in fact interested Cameron.

There is besides a design which was exhibited in London—the project of a triumphal arch for Catherine, which was to be constructed in the south of Russia, possibly at Novgorod-Severski, which is very near to Baturin. This arch still exists.

Recently, about 1923-24, two plans of decoration for the Winter Palace were found at Gatchina Palace ; they are not signed in the usual way. (Sometimes he signed " Cameroni," as on the design in the British Museum.) These bear the inscription " 28 January 1796 ; for a gallery in the Winter Palace." The columns, of malacite or verde antico, are disposed in a spacious manner : the bases and the capitals are of gilded bronze ; in the friezes the acanthus is varied with other motifs ; above the columns are cariatides in black marble. The colours are very vivid. This taste for polychromy is characteristically English. Even to-day it is to be found in the colouring of columns, painted eaves and water pipes in several parts of London. Finally, Mr. W. K. Lukomski discovered in 1918 at the palace of Alexander an album of designs with Cameron's arms as the book-plate.

Cameron was very busy, but of all his activity little evidence remains when compared with that of Quarenghi. Perhaps other drawings will be found elsewhere.

Tsarskoje Sélo

The first four years of Cameron's activity in Russia were spent at Tsarskoje Sélo, where he devoted himself to the private apartment of the Empress, to the Great Palace and to the *Bains Froids* in the second storey of which is the Agate Pavilion. Besides this he built what is called the apartment of Elisabeth Alexéievna (wife of Emperor Alexander I), which suffered a great deal by fire in 1803 and by a bad restoration. These apartments remained in a very damaged condition until 1917, when the artistic commission over which I had the honour to preside from May 1917 until November 1918 succeeded in re-establishing Cameron's works in their right places : the furniture was moved in order to recreate the whole plan which had been so unhappily altered between 1830 and 1917. The *Salle des Arabesques*, the *Salle des Lyons*, the *Salle Chinoise*, the rotunda which made up Catherine's apartments, were reconstructed in 1917. Unfortunately several architectural details are not yet restored according to the designs of the author.

After these show apartments we must mention the little rooms of the Empress—the Silver Cabinet, the smoking-room, the bedroom, the Room of the Mirrors, Raphael's room, the boudoir, etc.

The Silver Cabinet is no longer decorated with silver ornaments, but with pilasters covered with paintings. The smoking-room and the bedroom are decorated with very slim and elegant columns of glass and procelain and Wedgwood china. One notices a distinct Pompeian and Palatine influence in all this ornamentation. The parts of the Agate Pavilion are much more simply decorated—almost like Roman temples. The richness of the materials is incomparable—various marbles, agate, jade and porphyry cover the walls and decorate the columns and vases ; often the capitals of the columns and the vases are of gilded bronze.

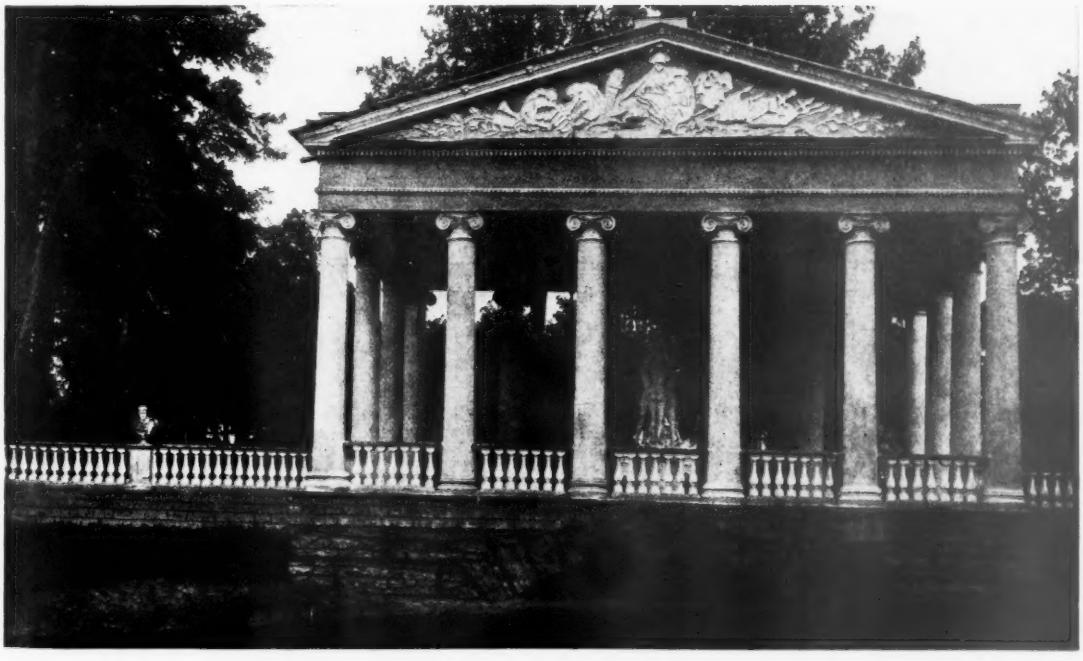
The Agate Pavilion is built over a terrace which is prolonged by a covered Ionic colonnade, the *Kameronova Galereja*. Above are the baths. A staircase enriched with statues descends to the gardens, and from the terrace of the pavilion a gently graded slope is mounted on enormous rustic arches. These parts of the palace built by Cameron form his most important and remarkable work. The form is Roman, with an admirable robustness about it.

The apartment of Elisabeth Alexéievna is composed of the bedroom with porcelain columns (white and pistache) embellished with medallions of sculpture by Rachette, of two reception rooms—the Blue room and the Chinese room—with splendid fireplaces of white marble, of a dining-room (white and pistache), whose walls are covered with pieces of bas-relief, and of some smaller rooms such as a music-room, a wardrobe, etc. This apartment is possibly the first that Cameron built : it was a sort of trial effort. We know that Catherine resided in this part of the palace

during the beginning of her reign. But soon after she moved into the southern part, where she had arranged another apartment even more richly decorated, Cameron appears to have begun with the apartment which is next to the chapel of the palace, and with the room of the *Bains Froids*, which is above the gallery. He finished with the Agate Pavilion.

Finally, to complete the review of the works built by Cameron at Tsarskoje Sélo, we must make a note of the buildings of less importance, but still of some interest, as they bear witness to the influence of Chambers. The Chinese Village, an example of that vogue of Chinese art so popular in Europe at the time, was composed of a Chinese theatre, some bridges, kiosks and pavilions. It was placed in the English garden of Alexander's palace. It was possibly Cameron's last work. It dates from about 1782-86, the period when Alexander's palace, designed by Quarenghi, was in course of construction. The Chinese theatre is magnificent, with its hall, its vestibules, its foyer and antichambers. Even the furniture is in the Chinese style.

PAVLOVSK. *On right:* Temple of Friendship
Below: Temple of the Three Graces
from *Hist. Survey of St. Petersburg, etc.: Pt. 6*



PAVLOVSK. The Temple of the Three Graces
from *Hist. Survey of St. Petersburg etc. : Pt. 6*

Finally, Cameron built the Church of St. Sophia at Tsarskoje. It has fairly low cupolas, and bears the following inscription in English—" Charles Cameron, architect, 1782."

PAVLOVSK

The names of Cameron and Pavlovsk have become inseparable. Almost everything that is connected with the palace and the pavilions is attributed to this great architect. This is a little exaggerated because Brenna, his former adjutant, who became his rival, also collaborated. But the spirit that animates these buildings is truly that of Cameron.

He visited Pavlovsk for the first time shortly after his arrival in Russia, probably in the spring of 1780. It appears that he had been asked in the first place to take up the designing of the gardens, because the pavilions of Marienthal and Paullust were already almost completed. Perhaps he had been asked to come in order to choose the site for the " Temple of Friendship," the construction of which he had been entrusted with. By 1779-80 the necessary materials were already assembled. The artificial Classic ruins which then existed gave him the idea for the site. He began by building the park for the Grand Duchess Marie Feodorovna. Here better than anywhere up to now he could give free run to his fantasy and poetic ideas. The Grand Duke Paul and the Grand Duchess followed his projects with enthusiasm. The ancient palace of Paullust was demolished and the construction of the new palace was begun in its place. Cameron made an excellent impression on the Grand Duchess, but he frightened her by his prodigality. More and more he began to appear as odd and fantastic—let us not forget the portrait of him. In truth his designs had nothing in common with those of his fellow workers (Quarenghi, for instance). He worked very rapidly, as through the guidance of inspiration. There is emotion and pathos in his designs. He knew how to animate his noble clients as he animated his collaborators.

The Empress had understood the enthusiasm of the poet-architect, and had overlooked more prosaic questions about the cost of construction. But it was quite different at Pavlovsk. The economy of the Grand Duchess Marie, the difficulty of corresponding with his patrons, who were then travelling in France and Italy, the fact that Cameron's project was not presented by himself but by Küchelbecker, his prodigality, all created difficulties and caused grumbling against Cameron. He demanded many costly building materials ; he did not always get enough or they arrived too late. The purchase of silk at Lyons was done without taking the correct measurements. All these misunderstandings had disagreeable results ; little by little Cameron was pushed out. The administrator, a little German official, punctilious and intriguing, helped to alienate the sympathy and confidence of his masters. Still another reason was Paul's antipathy for Catherine, who had been Cameron's protector.

The entire correspondence between the Grand Duchess Marie and her administrator gives us some traces of the character of the architect. He was very sure of himself and accurate in his decisions. He was an independent artist whose conceptions were clear and simple, whose taste was classical and restrained. He lived among the images of classic beauty. He would have been quicker to sacrifice his own ideas than to renounce the classical ideal. He considered that one copy of an ancient building was worth more than all modern creations.

He wrote to the Grand Duchess when she was in Rome saying that he would like to have casts of the decoration which adorns the vault of the Villa Medici. He wanted them for the palace. He intended to use them, such as they were, and introduce them into his own work. They were sent to him. Dampness and other minor accidents occurred and damaged them,

BATURIN. Rasumovski Palace (1798-1800)
Above. A detail of the bay
On right. Plan

and in the end he was accused of being the cause of their loss.

It was in such little ways that he gradually lost his full powers. Little by little Brenna and Scotti superseded him.

He was still not unwelcome at Pavlovsk ; it was even propounded that he should construct some new pavilions. But it was Brenna who was entrusted with the execution of them because he never contradicted. After Catherine's death everything went badly for Cameron. He made an attempt to defend his belief, his art and his ideas. Nevertheless it was he who created Pavlovsk : the physiognomy of Pavlovsk. It was he who introduced that pastoral and idyllic character. But what disillusions he experienced ! He began the project for the park, and it was Gonsago who finished it. Then in 1803 the palace was considerably damaged by fire, and almost all the part that was Cameron's work had to be rebuilt.

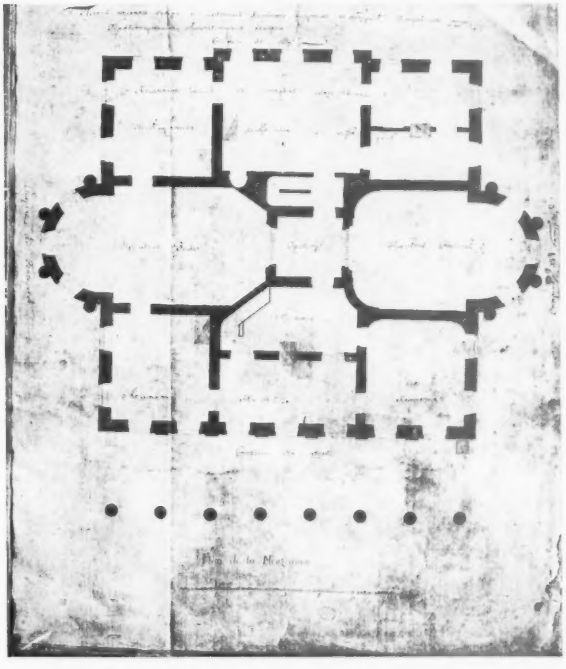
Even after his death fate was not less kind to him. In 1920-23 all the authentic Roman statues were taken away from Pavlovsk. Thus despoiled, the Summer Pavilion and the Ruins lost their soul and their classical feeling. His busts and statues were taken away from the palace, and so the last evidence of Cameron's dreams disappeared.

At Pavlovsk Cameron built the Great Palace (1781-1796), the Temple of Friendship (1779-82), the Colonnade of Apollo (1780-83), the aviary (1781-84), the obelisque commemorating the foundation of Pavlovsk (1782), the dairy (1780-84), the kitchens (1783—these no longer exist), the cattle-shed (1786—disappeared), the ancestral temples (1786), the stables (1787—restored), the music-room (1799), the Portico of the three Graces (1800), the Pavilion of Elisabeth (1800), the residence for the priest, the orangery (disappeared), the bridges and cascades (almost all disappeared), some villas, and the hospital.

Almost all the designs for these buildings have been preserved. Twenty-seven are signed, about thirty are unsigned, another thirty were executed in his studio, though not by Cameron himself.

BATURIN

In the Russian provinces Cameron did not build much except for the palace at Baturin, and, not far from there, the triumphal arch of Novgorod-Severski,



BATURIN. Rasumovski Palace. State in 1911 at the time of its restoration

LALITCHI. Zavadovski Palace in 1910

which can be attributed to him, though with some uncertainty. After Menchikoff it was Cyrill Count Rasumovski who received Baturin as a gift in 1759. He lived there during his latter years. At his death in 1803 it was not finished and was abandoned. In 1900-1911 Cameron's signed plans were found at the house of Prince Repnine. Quarenghi probably only did the interior (he was at work near by for Zavadovski Lalitchi, and at Khotien for Stroganoff).

The palace remained in ruins for nearly a century, and it was only in 1911-12, thanks to my initiative, that the building was restored by a descendant of Hetman Cyrill Count Rasumovski. But in 1923 a new fire damaged this work of Cameron.

We can attribute to Cameron—though with no great certainty—a part of the work at Bachtchisarai (in Crimea, ancient capital of Tatarian Taurida). He did this work during Catherine's reign. As we know, she undertook a journey to the south after the Turkish war. The palace of Bachtchisarai was reconstructed and certain parts were decorated in the style of Louis XVI. The plans are signed Hastie (an assistant of Cameron?). Can we believe that this is a work by Cameron? Baturin was on the direct route from St. Petersburg to the Crimea, as Prof. Richardson (*Architectural Review*) remarks. But we must wait until the researches in the archives are accomplished before we can establish definitely whether this work belongs to him.

The part which Cameron played at the end of the 18th century was very considerable. Did he leave a school? No. If he did not have followers, he had assistants who could appreciate him. His name remains among the most illustrious in the history of English architecture, for he was one of the pioneers of English art on the Continent. The expansion of English art has been very little studied. The study of Cameron's work allows us to fill in an important lacuna. His name can stand beside that of Chambers and beside those of the most famous English architects.

TSARSKOJE SÉLO. A pavilion in the "Swiss Village"

THE INTERNATIONAL FEDERATION FOR HOUSING AND TOWN PLANNING

This Federation grew out of what was loosely called abroad the English Garden City movement, under which term was included not only the Garden City proper at Letchworth, but model housing estates like Bournville or Earswick, and garden suburbs like Hampstead ; and, indeed, the open method of planning and building small self-contained houses in gardens.

Few English movements attracted so much attention and admiration abroad. Organised visits of professional men, municipal officials, and many others from foreign countries became numerous, and summer schools were organised to study English methods of town planning, garden city and other developments. The visitors brought accounts of what was being accomplished in their own lands on similar or on quite different but none the less interesting lines. Both we and they realised that there was very much which could be learned from each other, and that a constant interchange of ideas and experience would be highly beneficial to all.

An international congress to compare and discuss experiences in the work was held in Paris in 1913, at which there was founded the International Garden Cities and Town Planning Federation. A second very successful international congress was held in London in July 1914. The war then cut short the activities of the Federation, which were, however, resumed after, and the next congress was held in Brussels in 1919. Thereafter they have been held at frequent intervals in London, Paris, Gothenburg, Amsterdam, New York, Vienna, Rome and Berlin. The last was held, as readers of this journal will remember, in London last year, in the new building of the R.I.B.A., by their kind permission.

After the war, housing was the more pressing problem, and received a large share of attention : though the planning problems were not neglected. In 1922, and again in 1924, the basis of the Federation was widened ; and at Vienna in 1926 it took over the functions of the Comité Permanante des Congrès Internationaux des Habitations à bon Marché, and thus included all branches of housing and town planning, and amended its name to indicate this.

In addition to organising numerous congresses, the Federation has prepared and issued numerous valuable bulletins, giving careful studies from experts in every subject, of various aspects of the problems dealt with. Among those treated in recent bulletins may be mentioned town planning education, parkway systems, preservation of open land, architectural control of buildings, and the planning of industrial areas.

The Federation, through its General Secretary, Mr. Donald C. L. Murray, 25 Bedford Row, W.C.1, acts as an international bureau for the collection and exchange of information as to practice and developments in all parts of the world. They have special facilities for this work, as the chief technical and public institutions, national and municipal, are affiliated to the organisation. In this way the Federation is linked up with twenty-six or more foreign countries, and with many of the Dominions and Colonies. The value of its help and the good influence exerted has been widely recognised ; and the Committee now wish to extend that influence in many ways, such as the holding of local congresses in counties and districts where a large self-supporting gathering would not be practicable. They wish also to extend the scope of the research work and comparative study of methods to be found in different lands ; and thus they hope to make the interchange of information and the replies to queries from members still more complete and valuable.

The general aim of the Federation is to secure higher standards of housing, better methods of town expansion, and more enlightened handling of town and country planning, by using the experience gained in different countries, not to produce any uniformity of practice, which in view of the wide difference in circumstances of all kinds would be as foolish as, indeed, undesirable, but to improve home practice.

To enable the Federation to carry out its programme effectively, wider support is desirable. The benefits of membership of the Federation, including the bulletins as issued, are open to public bodies, municipalities, etc., on payment of a subscription of £2 per annum ; to technical, scientific and other bodies on payment of £1 per each 200 members up to a maximum of £5, and the list of affiliations under these heads in many countries is already a long one. For individual members the subscription is £1 per annum. There can be no doubt as to the growing importance of knowledge of foreign experience, and close touch with workers in other lands, for all who are engaged in the professions, in public administration and social work.

Membership of the Federation should therefore appeal specially to those of our own or the allied professions who deal with any aspects of housing, town or country planning, or of public or social work.

RAYMOND UNWIN.

A telephoto view of Broom Park group of estate cottages showing the way in which the houses are spread outwards down the slope of the hill to obtain sunshine and view

THE ARCHITECT AND HOUSING BY THE SPECULATIVE BUILDER—VI

SOME ESTATES IN DEVON

Architect: Louis de Soissons [F.], S.A.D.G.
Builders: Staverton Builders, Ltd.

Previous articles in this series* have dealt with various aspects of the employment of architects by speculative house builders. In this article is described the work of a West Country firm of builders who employ an architect in a general consulting capacity for a variety of estates of different types.

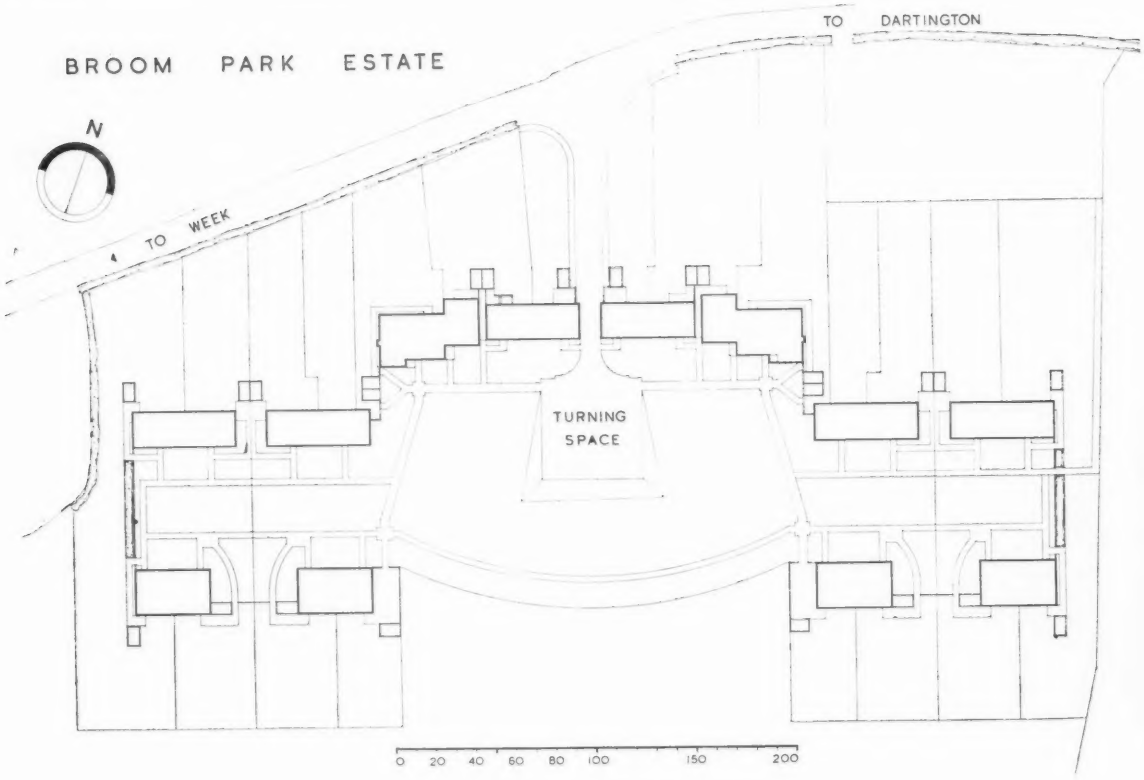
Staverton Builders, Ltd., are somewhat different from the ordinary independent firm of building contractors. They form one of the associated companies of Dartington Hall, Ltd., with which enterprise most architects are in some degree familiar. Dartington Hall, Ltd., may be described as a successful effort to develop rural industries and education. The company is concerned, among other matters, with agricultural research, dairy farming, forestry, market gardening, cider-making, textiles and saw milling. Associated with the estates are schools for children of all ages.

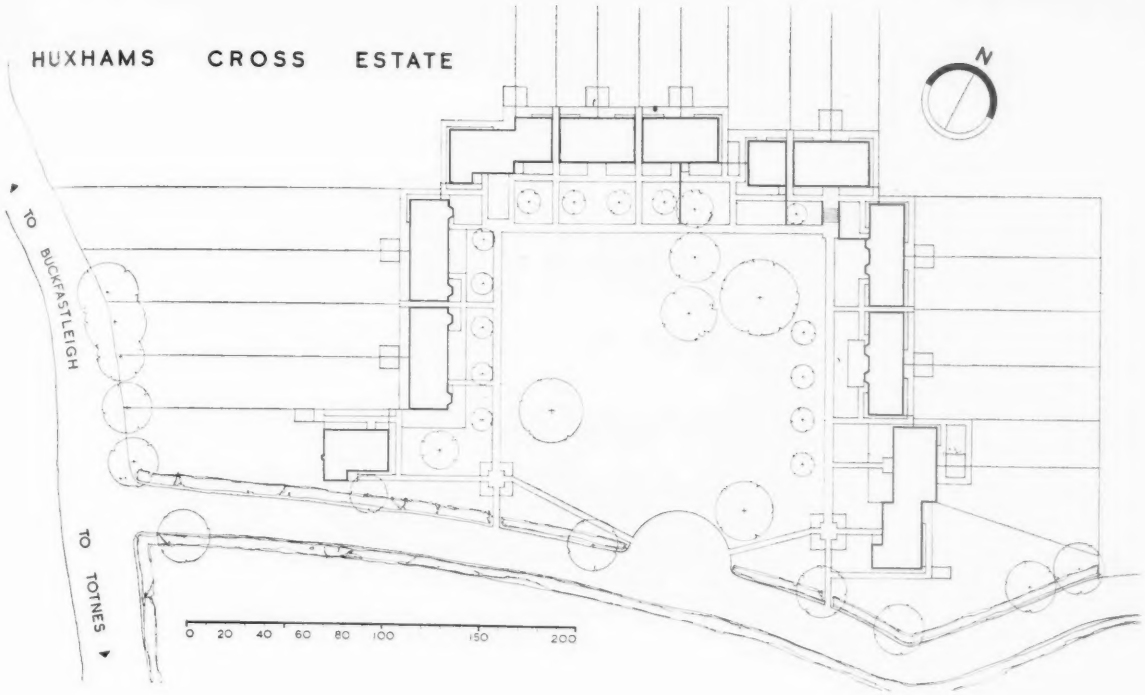
Staverton Builders, Ltd., were formed at the same time as Dartington Hall, Ltd., to carry out the building work necessitated by this extensive development of what had up to that time been a typical English rural estate. Subsequently they entered into general building work, both contract and speculative.

Speculative builders in this country vary from the worst—the "build-and-run" type—up to reliable firms who maintain a tradition of good quality work. These last usually operate in their own neighbourhood where their reputation will inevitably govern their future success. It is also to be expected that where, as in the case of Staverton Builders, the founder of the parent company is imbued with ideals of service those ideals will not easily be lost under the pressure of

*R.I.B.A. JOURNAL, 24 February 1934, 28 April 1934, 23 June 1934, 7 September 1935, 18 January 1936.

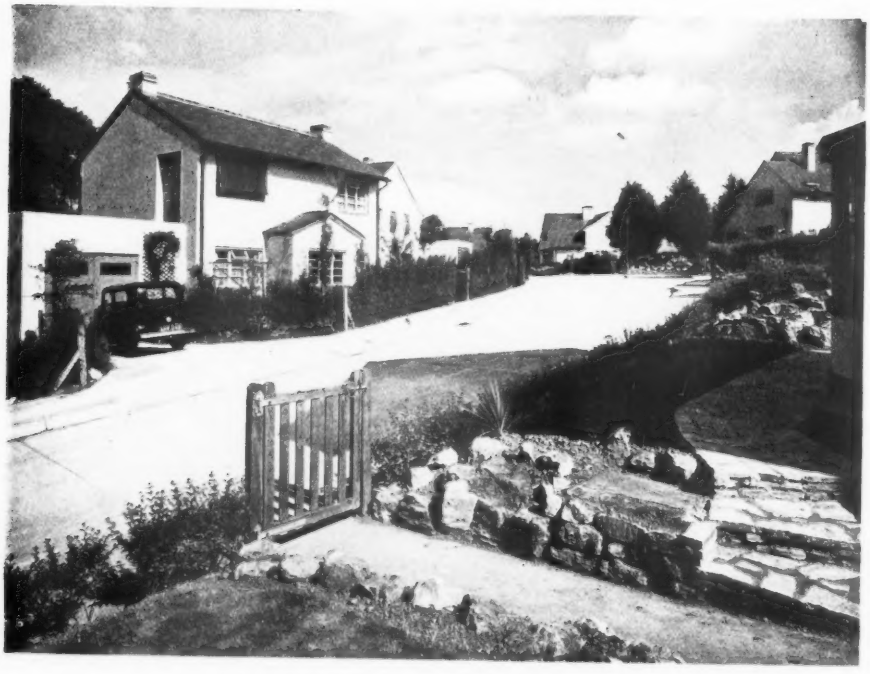
Part of the group of estate cottages at Broom Park





Part of the group of cottages at Huxham's Cross. The roofs are of grey asbestos sheeting

Typical houses in the Cliff Park Paignton Estate



Houses grouped round the cul-de-sac in the Cliff Park Paignton Estate

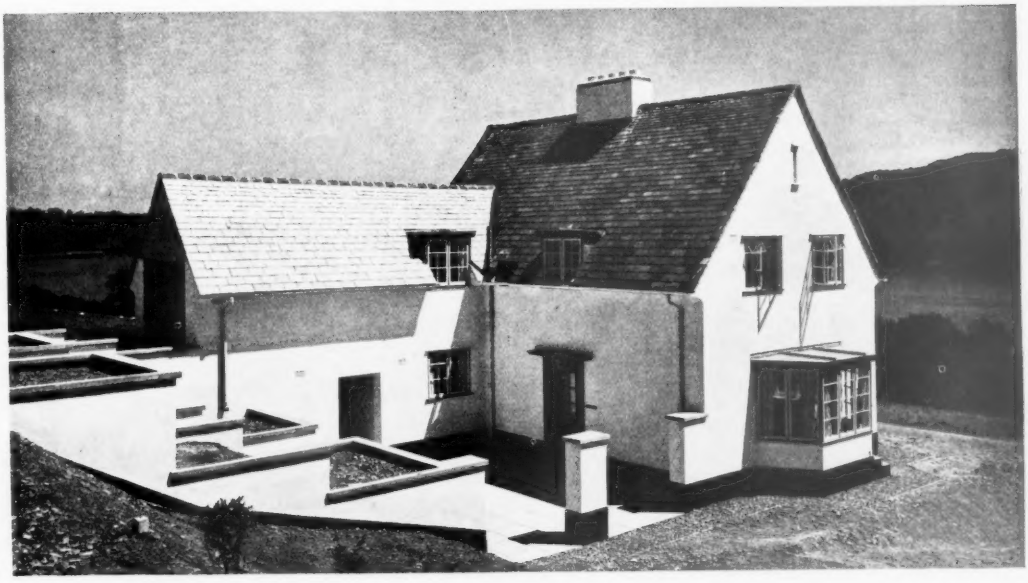
commercial enterprise. The firm is therefore not generally typical of speculative builders in this country, though it is by no means unique. It is this class of speculative builder which most deserves encouragement. The company is guided in its estate work by principles and a policy which may be described in general terms. Having regard to their reputation they hold that good building pays, apart from questions of design. Moreover, it would not be worth while employing an architect unless they did build well. The choice of architect is important. The employment of a staff junior—a "tame architect"—is considered to be bad policy; whereas the appointment of a consulting architect of acknowledged reputation in house design not only gives the best results but is also a guarantee of quality in the houses and therefore a good "selling point." In other words, it pays the speculative builder to pay for the best advice he can get and to take it.

Sites for development are chosen and enough land bought to fulfil a known demand in a district. Very thorough surveys are made, including such matters as the kinds and conditions of trees, shrubs and hedges, the nature of the subsoil and all the external factors likely to influence the proposed development. One such survey by this firm was some time ago commended by the C.P.R.E. as a model. Care is taken that as far as possible the development shall not subsequently be spoiled by other building on adjacent sites.

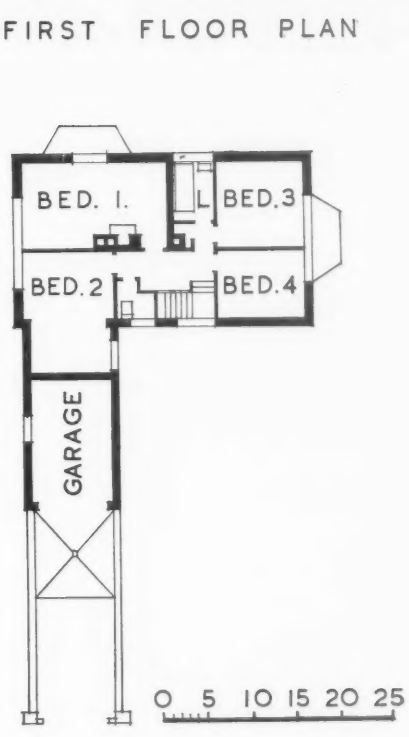
Actual layout of the site is considered to be all important. The principal aim is not merely to conserve existing amenities but to create a harmonious unit of development that fills its place in the countryside. It is worth noting that purchasers of the first houses built on an estate are given a guarantee that in no circumstances will the houses built later be of less value or poorer quality than their own.

These aims doubtless appear on paper to be unduly altruistic and to militate against the profit-making function of a commercial undertaking. The builders say that they could undoubtedly make larger profits more immediately by putting up the ordinary cheap villa of the kind that is known to sell readily. It is an acknowledged fact that the plain house of good design does not sell so well as does the meretricious villa. But apart from any altruistic aims of educating public taste, they hold that the policy of building architect-

Surroundings of Dittisham Estate



Dittisham Estate. A typical house. The garage is at first-floor level



St. James's Priory Estate, showing the composition of shapes in a group

St. James's Priory Estate. Group of houses, The Quadrant, Topsham Road

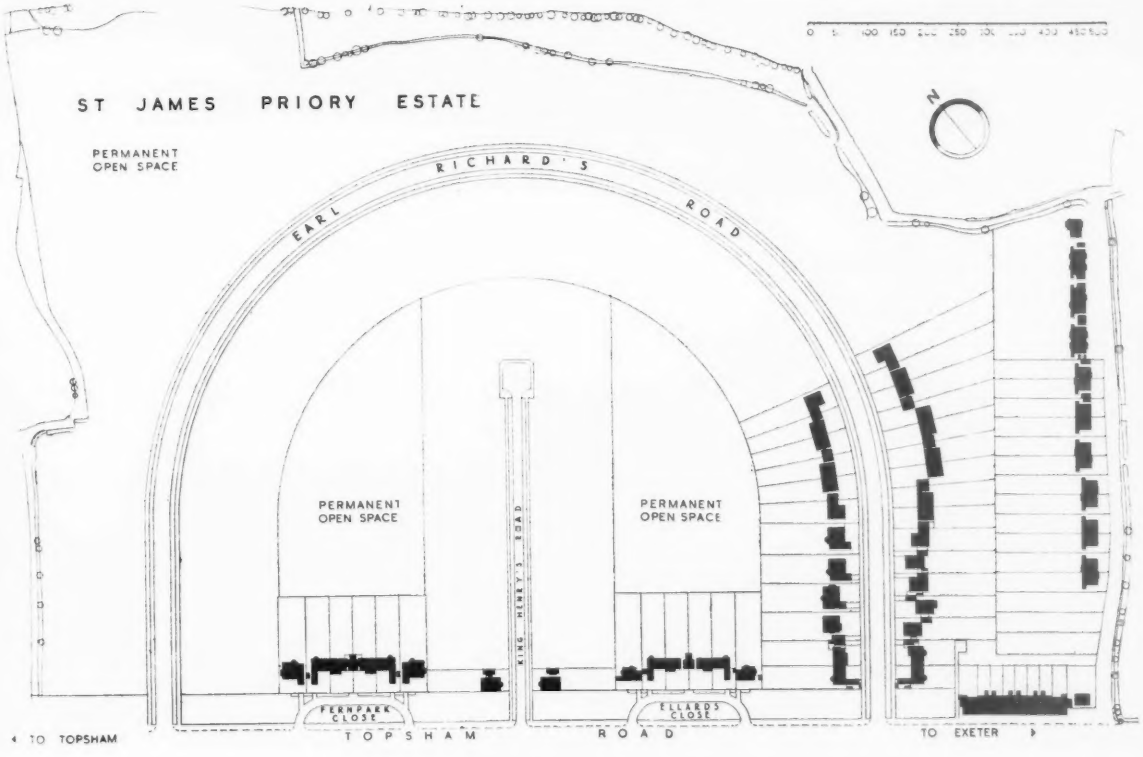
By permission of "Architecture Illustrated"

designed houses that are well planned, well sited, in harmony with their surroundings and of which the values are guarded as far as possible against deterioration will in the long run be *commercially* better for the builders.

The estates illustrated in this article vary from those containing relatively expensive houses, which, though generally similar in design, may be varied to suit the requirements of individual clients, down to working-class cottages. All are, however, simple in character, having for the most part white walls and low-pitched roofs, usually of Cornish slates, and painted wooden windows. Thus they accord with the general traditional appearance of the landscape.

Two of the estates, at Huxham's Cross and Week, do not properly belong to an article on speculative building as they are groups of estate cottages for Dartington Hall, Ltd. Nevertheless they have been included because they were designed by Mr. de Soissons and built by Staverton Builders, Ltd., and represent the simplest and cheapest dwellings which the two, working in combination, have produced. There is nothing remarkable about the actual plans of the cottages, which follow accepted lines. Almost the whole of the interest and charm of these two schemes arises from their layout and massing. In both cases the layout is unusual and one has only to consider how the typical speculative builder would have planned them to realise how effective really skilled layout can be.

The Huxham's Cross scheme is secluded from the main road and approached by a typical Devon lane bordered with high banks and trees. The lane opens into a small concreted semicircle, beyond which are lawns. The houses compose well on the gently sloping ground, with the open side of the group to the south. In the scheme at Broom Park, the site is the brow of a hill sloping away on three sides from the road on the north. The groups of houses step outwards and downwards so that good views and sunshine are obtained in all of them. This is well shown in the view, reproduced at the head of this article, which was taken with a telephoto lens from a neighbouring hilltop. The cottages are built with cavity walls finished with white stucco ; the flat pitched roofs are of large grey asbestos tiles. The harmony which exists between these groups of cottages and those traditional to the neighbourhood clearly emphasises the truth that such



harmony lies in shapes and colours and not in the materials used.

Cliff Park at Paignton is a speculative scheme which is the development of a small estate containing an existing large house. The site lies to the south of the Paignton-Brixham road and has direct access to the beach through an arch beneath the railway. The line of the original drive leading to the house was kept because of its avenue of pine trees, an additional cul-de-sac being made on one side. The houses, which are practically all sold, range in price from £1,050 to £1,750. They are similar in construction and employ generally the same planning units, but they are composed in varying groups to give variety and interest. This unusual feature is common to all the estates. It is an answer to the often stated belief that one cannot do much to prevent monotony in building schemes consisting solely of small houses. The existing house on the site was converted into a number of flats and painted externally to accord with the new houses.

The Dittisham Estate is another development of the ground, in this case extensive, attached to an old country house. Dittisham is an unusually charming old village lying on the steeply sloping side of the Dart Estuary. The estate forms a peninsula in a loop of the river, upstream and a little detached from the village. The peninsula has steep sides running down to the foreshore. Mr. de Soissons laid out a loop road roughly following the line of the river so that all the outer houses possess their own lengths of foreshore. The slopes are, however, so steep that the houses on the inner side of the loop road look over the roofs of those on the outer side.

The architect has taken advantage of these unusual levels to produce some original house plans; for instance, the garages are at first floor level in many cases. Building work has not as yet progressed very far, but what has been done indicates the same care for general composition and preservation of landscape amenities which characterises the others. This estate has an unusual public appeal. It is secluded, rural and on the "wrong" side of the River Dart. Potential purchasers are mainly retired persons who want to live amidst beautiful scenery or who engage in yachting. Prices vary from £695 to £1,650.

Quite different is the St. James' Priory Estate, which is a suburban accretion to the city of Exeter. Its character is that of the great majority of better class housing estates, namely, those that are inhabited by persons who go daily to work in city offices. Consequently the houses are more "town" in character than in the other estates; that is, they have facing brick walls of good colour and texture, Cornish slate roofs and white painted sashes or casements. The composition of the groups is very well done, the units being skilfully linked together by connecting walls and the garages and outhouses.

Small houses under construction on the Churston Estate, Paignton. They are staggered so that each has a view of the sea

The site falls gently from the main Exeter-Topsham road towards the River Exe to the west. A single loop road serves the greater part of the estate and there is a central cul-de-sac. The curve of the road, combined with the fall of the ground, allows a majority of the houses to enjoy the view across the Exe valley. Three permanent open spaces have been arranged in back land in which tennis courts, gardens and a children's play park are to be provided.

Of the last estate, that at Churston, near Paignton, we only show one photograph as house building has only just begun on it. It is very large and irregular in level and slopes generally down towards its own beach. Some of the roads have, however, been laid out and the completed scheme promises good landscape compositions. The houses shown in the photograph are at present being built at one side of a road which curves down a hillside. The houses are staggered and at an angle to the road so that the living room and principal bedroom obtain views of the sea.

In considering these estates as a whole it will be obvious to the reader that they all start with the advantage of being situated amid beautiful scenery. But one has only to study the layout plans with consideration of what the ordinary speculative builder would have made of them to realise how the natural advantages have been enhanced and turned to account. Architects will doubtless have their own opinions on technical or design points in the schemes, but this group of estates clearly proves two things: the value to the speculative builder of skilled and independent architectural advice; the importance and immense possibilities of site planning. Finally, it will hardly be necessary to point out that the value extends beyond the builder and house purchaser to the countryside and to the community.

A FEW PRINCIPLES OF PROTECTION IN AIR RAIDS

BY COLONEL WILLIAM GARFORTH, D.S.O., M.C.

AN ADDRESS GIVEN BEFORE THE ROYAL INSTITUTE OF BRITISH ARCHITECTS ON MONDAY 22 JUNE AT 8 P.M., THE PRESIDENT (MR. PERCY THOMAS) IN THE CHAIR

1. The Air Raid Precautions Department

The Air Raid Precautions Department is a civil Department and is part of the Home Office. For many years the problems connected with the protection of the civil population against gas were considered by sub-committees of the Committee of Imperial Defence; but the whole matter was treated as secret. In May, 1935, the Air Raid Precautions Department was formed and took its place as part of the Home Office.

The activities of the Department extend in many directions and these include the passive protection of the entire civil population.

An air raid precautions organisation is being built up by local authorities. The Department is also in touch with factories throughout the country, and the managements of these organisations and of large business premises are being asked to prepare their own air raid precautions schemes so far as they are able. For this purpose lectures on the principles of protection in air raids are being given to factories, business organisations and chambers of commerce.

2. Air Bombardment of the Future

The air bombardment of the future would be very different to anything of a similar nature which took place in the last war. To illustrate this it may be mentioned that the speed of modern bombing aeroplanes varies from 180 to 300 miles an hour. Also the weight of bombs which could be dropped in this country in one day in the next war might bear little relation to the amounts dropped in the last war.

Great advances have been made in the design of aeroplanes, instruments and the technique of bombing, and all these considerations make it imperative that attention should be paid to the question of protection against air raids.

3. Bombs and Protection

Before going into details of what a modern air bombardment will be like, one or two remarks regarding bombs may be of interest.

Bombs do not strike the ground at right angles. In other words, the angle of arrival is inclined to the vertical. This inclination in the case of bombs dropped from, say, 16,000 ft. is 16 deg. and from 2,000 ft. is 38 deg. The height at which bombs can be released may vary from 20,000 ft. and over down to 1,000 ft. and under.

In an air bombardment three kinds of bombs can be used—the incendiary bomb, the gas bomb, and the high explosive bomb. Each will be dealt with in turn.

The Incendiary Bomb

The incendiary bomb may vary in weight from 1 kilo (i.e., 2 lbs. 3 oz.) up to 60 lbs. It is expected that the light kilo bomb will be more freely used than those of greater weight.

Experiments to determine the penetrative powers of the kilo bomb are now being undertaken, but it is known that this bomb will penetrate all forms of light roof, such as tiles, corrugated iron, slate, fibrous cement sheeting, glass, ruberoid, etc. Its penetration will, however, probably be arrested by the top floor of the building. Here the bomb would continue to burn for about ten minutes and would set on fire any inflammable materials in the vicinity, such as furniture, bedding, curtains, etc. A reinforced concrete roof 4 in. to 6 in. thick would probably, however, resist penetration by the kilo bomb, in which case the bomb would ignite on the surface of the concrete and then burn itself out.

As the bomb generates its own oxygen it is not easily extinguished and experiments are now being carried out to determine the best way of dealing with it. The cheapest and most readily available form of protection is to clear the attic or upper rooms of all inflammable material and to cover the floor with fine dry earth about 2 in. thick. A greater quantity of material affords even more adequate protection, but it should be borne in mind that attic floors might not be strong enough to carry more than 2 in. of this material. Similarly sheet iron (about 18 g.) or $\frac{5}{8}$-in. asbestos boarding (free from cement) can be used in place of the dry earth.

Although an incendiary bomb cannot be actually extinguished by sand, something may be done to control it by applying about 30 lbs. of this material with a long-handled shovel. By this action the glare is reduced, and the spread of the fire will be limited. Flames, however, will come out of the top of the sand. Chemical extinguishers, water, etc., can be used to limit the spread of fire. The water or chemical extinguisher should not be applied to the bomb itself, but should be used to keep the surrounding woodwork wet. If the bomb has been partially controlled with earth, it can be picked up with a shovel and put in a bucket or other suitable container which already contains 2 in. or 3 in. of dry earth or sand. Further earth or sand

should then be poured in the bucket before removing it from the building. In order to enable a person to approach the burning bomb non-inflammable dark glasses are essential.

Gas Bombs or Spray

The weight of a gas bomb will vary from a few pounds up to 250 lbs. and even more. The container weighs less than half of the total weight of the bomb.

Air Raid Precautions Handbook No. 1 (Personal Protection Against Gas), which can shortly be obtained from H.M. Stationery Office, contains much information regarding gases which will be used in war. It is not necessary here to do more than mention that there are two main types of poison gas which might be used, namely :—

(1) Persistent ;
(2) Non-persistent.

Persistent gases usually consist of liquids (e.g., mustard gas) which contaminate the area on which they are released and may continue to give off vapour for hours, days or even weeks if not neutralised.

Non-persistent gases, when released, rapidly mix with the atmosphere and disperse quickly.

As regards respirators, there are three types, the Service respirator, the Civilian Duty respirator, and the General Civilian respirator.

The Service respirator, which is the type used by the Defence Services, will be used by those who must enter and remain in heavy concentrations of gas, such as policemen, firemen and members of decontamination squads.

The Civilian Duty respirator is intended to afford protection to persons who have to carry on their normal duties in the presence of poison gas but who are not likely to be exposed to such high concentrations as the Defence Services, police, etc.

The General Civilian respirator is intended for use by members of the general public.

All the above respirators are designed to protect the wearer's eyes, face and lungs from any known poison gas which may be used in warfare.

High Explosive Bombs

High explosive bombs carried by aircraft weigh anything up to 3,000 lbs. each. A bombing aeroplane can carry from two to three tons of bombs. Owing to the great expense of the heavier type of bombs, such as those weighing 1,000 lbs. and over, it is unlikely that these will be used except against special targets such as arsenals, dockyards, railways, etc. Those weighing under 1,000 lbs. will, however, be quite common, and the effect of these bombs may be classified under two heads, namely, fragmentation and blast.

Fragmentation is the breaking up of the shell of the bomb into small pieces, which inflict damage to material and personnel in the vicinity.

Blast is the sudden creation of high air pressure designed to shatter buildings, machinery, etc., which may be exposed to it. The effect of blast dissipates rapidly, but in the case of heavy high explosive bombs bursting, say, less than 50 ft. away from a building the effects of blast may be considerable. Most buildings would probably suffer severely.

High explosive bombs may be of two kinds : (1) those intended to explode on contact with a hard surface, in which case they are fitted with percussion fuses : and (ii) those intended to penetrate deeply into the ground or into a building, in which case the bomb is specially strengthened and fitted with a semi-armour piercing nose.

A 500-lb. bomb fitted with a percussion fuse, when falling on a large multi-storeyed building, would detonate on the roof, or certainly on the top floor, bringing down a considerable part of the building with it. Medium and heavy bombs fitted with a semi-armour piercing nose would penetrate right through such a building down to the basement before detonating, when a great deal of damage would be done.

Protection from high explosive bombs fitted with percussion fuses would be afforded by highly reinforced concrete about 5 ft. in thickness, but the semi-armour piercing bomb must also be considered.

Protection from 500-lb. high explosive bombs fitted with semi-armour piercing noses can only be secured by constructing shelters at considerable depths below ground level, say, 50 ft. to 70 ft., or by protecting the shelter or basement by an independent mass of concrete highly reinforced from 12 ft. to 15 ft. thick. As both these forms of protection are very costly it will, as a rule, not be possible to provide protection against direct hits of medium and heavy semi-armour piercing high explosive bombs. In exceptional cases, however, such as vaults for banks or other special buildings, such protection may not be out of the question.

Efficient protection can, nevertheless, be provided against the effects of blast and splinters from the explosion of high explosive bombs. Good protection can be afforded in cellars or basements or specially constructed underground shelters. In the absence of this form of protection, shelter can be obtained on any floor of a building provided the shelter is made gas tight. And, in the case of ground floors, sandbag walls (or sand or earth between shuttering) across the window and door openings can be provided to prevent the ingress of splinters.

Thickness of Materials to Resist Penetration

The following thicknesses of various materials will resist penetration by splinters from a 500-lb. bomb exploded at a distance not nearer than 50 ft. away from the materials named : mild steel plate—1½ in. (special steels may give increased resistance) ; stock bricks in cement mortar—13½ in. solid and 15½ in. hollow (with 2-in. cavity) ; ordinary concrete not weaker than 6-1 mixture—1 ft. 3 in. ; reinforced concrete—12 in. (normal structural reinforcement) ; reinforced

concrete—10 in. (specially reinforced to resist the punching shear effect of the splinters) ; sand or earth—2 ft. 6 in. ; shingle or ballast—2 ft. ; shingle contained between steel plates, front plate ¼ in. thick, back plate ½ in. thick—10 in. ; coal (lump or dust)—2 ft. 6 in. ; brickbats—2 ft.

Trenches

If suitable protection for personnel cannot be found in a building excellent protection can be obtained in shelter trenches 7 ft. deep with passage ways 2 ft. wide. Recesses suitable for the accommodation of, say, ten men seated are cut off these passage ways. The trenches should, of course, be revetted. Various forms of revetment can be used, such as boarding, corrugated iron, or other suitable materials. The trench can be made gas proof by covering it with 2 ft. of earth supported on corrugated iron. If rubble is available, a layer of 9 in. of this material should be placed on top of the earth. Where revetment is used the excavated width of the passage way should be 2 ft. 10 in.

An air lock should be provided in the passage way at each entrance. This may take the form of two gas curtains 4 ft. apart with a shelf at the side of the trench on which the curtains are placed when not in use.

A diagram of a trench system for accommodating several hundred people, together with notes on the construction of the trenches, can be obtained from the Air Raid Precautions Department.

Similarly, notes on the construction of mined galleries are supplied by the Department.

Shelters and Gas-Tight Rooms

Information regarding the making of a room gas tight is given in the *Handbook for Factories*, which will shortly be on sale at H.M. Stationery Office.

The same principles apply to making large basements, etc., gas tight.

As regards shelters in general, certain points should be borne in mind. These include a supply of water independent of the normal water supply mains (which may, of course, be damaged), an independent lighting system, sanitary arrangements, a supply of food and self-contained wireless.

Further notes on this subject can be obtained by application to the Department.

As regards the selection of cellars or basements as shelters, it is most important to bear in mind the possibility of flooding. In the case of cities where high pressure mains (which may be damaged by high explosive bombs) exist close to cellars or basements, this danger of flooding is very real, and unless it is quite certain that there is no possibility of flooding in this way cellars or basements should be avoided as shelters. This is a point which may easily be overlooked and which demands special attention.

In the case of newly constructed shelters, the ceiling should be designed to carry the weight of debris resulting from the demolition by high explosive bombs of, say, part of the building above it. For this purpose it is estimated that the floor should be strong enough to carry a superincumbent weight of 4 cwt. per foot super. The unsupported span of floors over the shelter (which form the roof of the shelter) should not exceed 15 ft. to 20 ft.

Dispersion

In cases where it is not possible to find protection in buildings or specially designed shelters, and where open ground is not available for trenches, the operatives of large factories and business premises may be dispersed to their homes. This, however, must be done within the warning period.

4. Warning of Raid

The country has been divided into areas and when the raiders reach a certain distance from any particular area that area is warned. With the great speed at which modern aircraft travel, it will be unwise to count on receiving more than 7-10 minutes' warning.

5. Protection of Material

Buildings such as power houses, first-aid posts, hospitals, telephone exchanges, and other buildings of vital importance will require special protection. This may be given in the form of sandbag walling across doors and windows and, in some cases, along the walls, etc.

In the case of large factory buildings, the question of protection of machinery has been considered. Sandbag traverses or traverses consisting of other materials such as bricks, shingle, etc., can be constructed for this purpose. Steel netting has even been suggested as a means of protection against splinters, but experiments have shown that this method of protection is unsatisfactory and is also very costly.

6. Windows

The blast effect on windows of bombs exploding about 100 feet away from a building is considerable. Ordinary glass panes will be broken into pieces which will be projected with high velocity into the building. This may cause serious damage to personnel. If, however, the following precautions are taken this danger can be prevented. The existing glass panes should have cellophane (as used for wrapping packets of cigarettes, etc.) or celluloid, 1/64-in. thick, cemented (by a cement varnish such as Necol varnish) to their inner surfaces. Glass treated in this way will be blown into the building but will not break up into pieces. If the panes of glass are, in addition, closely supported by ½-in. wire netting (the smaller the mesh the better) or other suitable foundation on the inside, they will not be blown into the building. This netting must be securely fixed to the frame of the window. Glass reinforced internally with wire netting offers considerable resistance to the effects of blast, although small fragments of glass may be projected from it which under certain conditions might be dangerous.

Vitreo-Colloid or other similar material offers considerable advantages as compared with glass in resistance of blast pressure. If a window to resist blast is required, Vitreo-Colloid in place of the glass, closely supported by wire netting or other suitable foundation, should be used. Such window panes will probably remain in position intact.

If Vitreo-Colloid is used, as suggested above, it is essential to ensure that the window frame is rigidly supported as it will have to withstand considerable pressure from the blast.

Steel or wooden shutters fixed to the outside of the window serve no purpose, as the pressure pulse due to blast passes through such shutters and will break ordinary glass window panes as described above.

With ordinary glass panes a steel shutter 3/16-in. thick fixed on the inner side of a window frame would stand up to blast and prevent glass splinters being thrown about the room. A wooden shutter to serve the same purpose would have to be 4 in. to 6 in. in thickness. Neither steel nor wooden shutters are, however, recommended for this purpose.

In view of the above, therefore, windows should be treated in one of the following ways :—

(*a*) Vitreo-Colloid closely supported by wire netting in place of the ordinary glass panes.

(*b*) Existing glass panes with cellophane or celluloid (1/64-in. thick) cemented on the inside should be closely supported with wire netting firmly fixed to the window frame.

(*c*) The panes of glass should be internally reinforced, that is, glass made with wire netting inside it.

7. Lighting Arrangements

All buildings should be provided with means of preventing lights being seen from the outside. This may be effected, of course, by means of carefully fitting blinds.

8. Camouflage

A few remarks about camouflage may be of interest. The object of camouflage is to disguise an object. In the war it will be remembered that whole battery positions were covered by scrim netting which, from the air, made the position appear as open fields, etc., and while a certain amount can be done to make it more difficult for the enemy pilot to pick up his target the shadows cast by vertical walls, etc., are the main difficulty to contend with. Tanks and gasometers can be rendered less conspicuous by painting the tops the same colour as that of the surroundings, with the sides painted of a similar colour, only a lighter shade. In addition, grey streaks can be painted across the roof and down the sides to simulate roads, and the outline of the tank or gasometer can be broken up by patches of black or other colour. In the original lay-out of a factory something can be done by avoiding straight roads, judicious planting of trees, and avoiding shiny surfaces as far as possible.

The main object to bear in mind is that if anything can be done to make it more difficult for a raider to pick up his target something has been achieved.

9. Smoke

The question of smoke is receiving careful consideration by the Department. If a smoke cloud is formed to conceal a target it should cover roughly nine times the area of the target in question.

Although smoke clouds to cover targets of any considerable area are, therefore, costly to maintain the matter is receiving careful investigation, as it is considered that, in certain cases, smoke will be useful in making it more difficult for the enemy to recognise and pick out his target.

10. Books being Prepared by the Air Raid Precautions Department

Books and memoranda on the subject of air raid precautions have been, or are being, prepared by the Department.

A.R.P. Handbook No. 1 (*Personal Protection Against Gas*) and *Handbook No. 2* (*First Aid for Air Raid Casualties*) can be obtained from H.M. Stationery Office.

A.R.P. Handbook No. 6 (*Factories*) will be available shortly from H.M. Stationery Office. This book explains how the managers of factories and large business premises can prepare their own air raid precaution schemes.

A very important book, namely, *Handbook No. 5* (*Structural Precautions Against Bombs and Gas*) is now under preparation. This book will be of a technical nature and will afford detailed guidance to architects, engineers, local authorities and others on certain of the matters referred to in these notes, e.g., the construction and adaptation of shelters and the protection of buildings of different kinds.

Such structural precautions may include a concrete roof to keep out light incendiary bombs, the use of fire-resisting materials in building, the roofs of shelters to be strong enough to take the weight of falling debris, i.e., calculated to stand a weight of 4 cwt. per foot super, framed structures (steel or reinforced concrete) preferable to the old solid type of structure and the use of non-absorbent building materials where there is danger of contamination by liquid gas.

11. The Preparation of Air Raid Precaution Schemes

All managers of factories and business premises employing over, say, 100 operatives are urged to prepare their own air raid precaution schemes.

Notes giving the suggested headings for such schemes are obtainable from the Department.

Beyond the preparation of a carefully thought out paper scheme, which can be readily put into operation without delay should an emergency arise, no further

action is now suggested. Arrangements should, however, be made for the supply, without delay, of the necessary materials, tools, sandbags, earth, etc., if and when required.

While it is hoped that the necessity for putting such a scheme into operation will never occur, it is incumbent on all in authority to prepare one.

The preparation of an air raid precaution scheme does not mean the inevitability of an air raid, any more than the taking out of a fire insurance means the inevitability of a fire.

Furthermore, it is hoped that architects will give the question of structural precautions their careful thought and consideration, as the safety of many thousands of their countrymen may depend on their labours in this direction.

12. Assistance of the Air Raid Precautions Department

Finally, it may be stated that the Air Raid Precautions Department is always at the disposal of anybody who may require its advice and assistance.

Vote of Thanks and Discussion

Mr. THOMAS E. SCOTT [*F.*], in proposing a vote of thanks to Colonel Garforth, said that when, a few months ago, he had joined the Committee to which Colonel Garforth had referred he had felt that it was impossible to do anything effective. As a result, however, of numerous discussions with Col. Garforth and with other people he had come to the conclusion that they as architects could, in point of fact, do a great deal.

A week or two previously, while he had been in Munich, a "black out" had been ordered by the Government so that the German Air Force in that district could carry out certain investigations. All the people of Munich had accepted that state of affairs without any question; in other words, they were not merely air-minded, but were becoming air-raid-minded. He suggested that they in this country must, sooner or later, become air-raid-minded without becoming panicky.

They all hoped that war would not come, but, if it did, they as architects would not be free from the charge of negligence if they did not take reasonable precautions now. If war came it would come far too suddenly for them to take any effective action. It was their duty, as those responsible for the housing of the people of this country and for the provision of factories and other buildings, to accept this new factor as an important one in architectural design.

Colonel Garforth had provided them with what was probably a somewhat expurgated version of the effects of an air-raid bombardment. Yet they might be forgiven, he thought, if they went away from the meeting feeling that, after all, a bomb can do so much damage that it was not worth while attempting to do anything about it. That, however, was not quite true. The Committee had spent a good deal of time in attempting to produce a book, which would be published in due course, in which they were setting forth as accurately as possible the sort of precautions which might be taken with various types of buildings.

They had decided, and the authorities in Whitehall had agreed, that it was certainly not possible to attempt to secure complete protection against any sort of air raid. They had discovered, however, that a great deal could be done without any appreciable cost and without interfering seriously, if at all, with the principles of good planning for peace-time purposes. That, he thought, was the crux of the matter and the real reason for which Colonel Garforth was there, namely, to stress the point that reasonable protection could be provided without seriously upsetting normal procedure. They were considering the precautions which could be adopted with various types of buildings. In regard to hospitals, for example, those who had had experience of air raids in hospitals during the Great War would realise the helplessness of those who happen to be in them. While they could not destroy the character and the ideals of hospital planning, they hoped to be able to suggest how to make hospitals a little safer.

The same must of necessity apply to schools, and perhaps more particularly to houses. They had almost completed consideration of the problems connected with the small house. While it was impossible to turn each of the millions of houses in this country into a dug-out, much could be done which should result in the saving of a very large number of lives and in the prevention of countless casualties if war should come. They could not afford as a nation or as architects and builders to add considerably to the cost of houses, but they could not afford as architects to ignore reasonable recommendations which might have the effect of saving some lives if war should come, particularly in view of the fact that giving effect to these recommendations was not likely to cost much, if anything. Those who had had experience in the Great War must have realised that very often the most elementary form of protection resulted in the prevention of serious injury and in the saving of life.

Recently, in Budapest, at the International Fair, he had seen an amazing exhibition devoted to air-raid precautions. All sorts of shelters were illustrated, built to full scale, and a vast amount of information was available showing how quite useful and cheap precautions could be adopted without interfering in any way with the normal functioning of a building.

They were also investigating the values of various

types of structure with reference to their resistance to damage and failure under air bombardment. It was impossible now to say much about this, except that the normal building practice in this country seemed to be as near to the ideal as anything likely to be obtained for ordinary types of buildings.

Colonel Garforth had for a long time past been doing an enormous amount of good work throughout the country. He had visited all the important factories in England and Scotland, and he was giving good advice and showing people what might be done to protect their buildings ; not to protect them in the case of a direct hit from one of the 3,000-lb. bombs which he had mentioned, but to minimise the damage to any individual building and to reduce the number of casualties among the workmen, who might be engaged on work of national importance in time of hostilities.

There were only three architects on the Committee, Mr. E. L. Bird, Mr. Ryle of the Office of Works, and himself. They were doing their best to provide for all the contingencies that occurred to them, but they could not think of everything. They would be grateful if those architects who had problems of their own, or who thought of problems which might confront others, would pass them on through the Secretary of the Royal Institute. He had great pleasure in moving a cordial vote of thanks to Colonel Garforth.

Mr. C. H. PERKINS [*A.*] said he would like to know whether there was any practical advantage in making the roof of a four-storey building to resist 1 cwt., instead of the permitted 75 lb. of the London County Council. He had gone into this, and in the case of a four-storey building it seemed to result in an increase of only 2 per cent. on the cost of the whole structure. Was there any additional safety to be gained by this ?

Colonel GARFORTH suggested that the question be answered by Mr. Scott, who said that he did not think it was likely to be economically sound to attempt to keep out even the small high explosive bomb, and the type of roof which had been mentioned was not likely to represent any great advantage over the roof which carries 75 lb.

Mr. STOCKDALE HARRISON [*F.*] said that Colonel Garforth had recently inspected in Leicester a building in which he, Mr. Stockdale Harrison, was interested, and which consisted of two very large weaving sheds, 400 ft. long and 80 ft. wide, which at the present time were being undermined for extra floor space. Colonel Garforth had suggested that this floor should be used for protection of the workpeople, who numbered about five thousand, against gas, and the clients had agreed to the proposal. He thought this case would show architects that there were some industrialists giving thought to this very serious subject.

Mr. MAURICE E. WEBB [*F.*] asked whether the Home Office was right when they said that London would only be sprinkled with little bombs.

He had noticed that in aerodromes built in this country all the hangars were close together, so that one bomb would smash up the lot. Similarly, in Whitehall all the Government buildings were close together. Why did not the Government take their own advice and spread their buildings about a little ?

Colonel GARFORTH said he must have expressed himself badly if he had given the idea that in their view London would be sprinkled only with light bombs. What he meant was that in the case of incendiary bombs numbers of the light " kilo " variety were to be expected rather than of the heavier type, but they also expected that many heavy high explosive bombs would be dropped on London all over the place.

The question of the siting of hangars was being dealt with, and so far as Whitehall was concerned, he asked whether Mr. Webb could tell him of much spare space in the neighbourhood ! There was, however, a new building going up near the Embankment, and the question of the best protection to be given to that building had been carefully discussed.

Mr. R. COPPOCK (London County Council ; General Secretary, The National Federation of Building Trades Operatives) said that he looked on this problem from a civic responsibility point of view rather than from the point of view which Mr. Scott had adopted. The problem to him was not one of hospitals but of children, and in that respect organisation would be much more difficult than in the case of disciplined hospitals. The London County Council was the administrative authority responsible for something like four and a half million people. Could the Home Office tell them how to deal with the East End ? What was the use of deceiving people in the East End into thinking that there was a possibility of their surviving an air raid ?

The London Fire Brigade and the police could not deal with the situation. The problem was an immense one for a built-up city such as London, and he did not know how it would be possible to deal with the position, particularly in the East End, even if they put all the people on Hackney Marshes !

To leave the provision of gas masks to private manufacture was a very serious thing to do, and he hoped that the Home Office would deal with the matter from a scientific point of view rather than allow the public to be exploited.

He was very anxious that our people should become air-raid-minded, but they would have to go down to the children in the schools and tell them of the horrors of war so that a strong desire for peace might be implanted in the children and be general throughout the country.

Mr. H. M. FLETCHER [*F.*] said he agreed with Mr. Coppock. This was a human problem. He wished to put a point of view to Colonel Garforth—to whom they were very much indebted for the clear and frank way in which he had expounded the matter—which he would probably think very defeatist. Was there any man there who could contemplate the extinction of our civilisation by other people doing this to us or by ourselves doing it to other nations ? If this sort of thing came about he did not want to be in a world in which it happened. It meant the end of everything that they had regarded as civilisation and humanity.

Mr. PATRICK WILSON said that protection against air raids only defeated the effects and not the causes. If they as architects were to do active work towards defeating the effects he thought it was their duty also to help in defeating the causes.

The PRESIDENT said he thought they ought to clear the air a little. It was no use asking Colonel Garforth to address the Institute on a technical matter if they were going to move the discussion into the region of politics. They were not there to discuss war and peace, but to discuss what precautions could be taken if unfortunately war did come upon them. It might be difficult—it might even be impossible—but they ought to see whether there was not some little thing

that they could do to improve the lot of the people if this horrible thing happened.

The President then put the vote of thanks to the meeting, and it was carried unanimously, with acclamation.

Colonel W. GARFORTH, in reply, said that the speakers had raised some very interesting points, and there were one or two to which he would like to reply. No one in England wanted war. But they could not control the activities of the international burglar any more than Abyssinia could control the activities of her invader, and that was why it was their duty to be prepared.

As regards the East End, schemes were being very carefully considered and worked out for evacuation in time of trouble. Similarly, the problem of the children was being carefully considered, though final decisions had not yet been arrived at.

Gas masks on sale to the public would have to bear the Government trade mark. People were not forced to buy any gas mask that was put on the market, and it was up to them to see that the mask which they bought bore the Government trade mark. This was one way in which the Government was attempting to protect the civil population.

He thought he could say that all the points mentioned were being carefully investigated by the Department. They should realise that he had also not been able to mention anything like all the points which were being very carefully and actively considered by the Department.

Review of Periodicals

Attempt is made in this review to refer to the more important articles in all the journals received by the Library. None of the journals mentioned are in the Loan Library but the Librarian will be pleased to give information about prices and where each journal can be obtained. Members can have photostat copies of particular articles made at their own cost on application to the Librarian.

SCHOOLS AND UNIVERSITIES

ARCHITEKTURA I BUDOWNICTWO (WARSAW). *Vol XII. 1936. P. 38.*

Schools: articles and illustrations of recent schools in Poland.

BUILDER. *Vol. CLI. 1936. 24 July. P. 158.*

Design for Dartford Technical College, by W. H. Robinson [*F.*]. Kent County Architect.

ARCHITECTURE D'AUJOURD'HUI. *Vol. VII. No. 6. 1936. June.*

University buildings: special articles and illustrations of university centres Paris, Rome, Montreal, Athens, Madrid, Oslo.

LABORATORIES, ETC.

ARCHITECTURE D'AUJOURD'HUI. *Vol. VII. No. 6. 1936. June. P. 42.*

Laboratories; several small pharmaceutical and medical laboratories in France.

ARKITEKT (ISTANBUL). *Vol. VI. 1936. P. 97.*

Observatory at Istanbul University.

MUSEUMS AND EXHIBITIONS

ARCHITECTURAL RECORD. *Vol. LXXX. 1936. P. 43.*

Scheme for a contemporary museum, New York, by Howe and Lescaze.

CONCRETE. *Vol. XXXI. 1936. July. P. 377.*

New Earl's Court Exhibition building. Article on construction.

TER ES FORMA (BUDAPEST). *1936. No. 7. P. 203.*

The Budapest Fair, 1936. Illustrations of buildings.

ARCHITECTURAL FORUM. *Vol. LXV. No. 1. July. P. 13.*

Colorado Springs Fine Arts Centre. A large building including working studios for all arts and art school, exhibition galleries, theatre for acting and lectures (seats 400). An interesting building. By J. G. Meem.

LIBRARIES

BUILDER. *Vol. CLI. 1936. 10 July. P. 61.*

National Library of Scotland. Mr. Reginald Fairlie's plans.

RADIO BUILDINGS

DE 8 EN OPBOUW (AMSTERDAM). *Vol. VII. 1936. 4 July.*

Radio Studio A.V.R.O., Hilversum; full description of plan, equipment and construction. Useful reference.

BYGGMÄSTAREN (STOCKHOLM). *1936. P. 203.*

Radio studios: article on acoustic problems.

SWIMMING BATHS

NATIONAL BUILDER. *Vol. XV. 1936. July. P. 424.*

L.C.C. swimming pool, Victoria Park, E. London, plan and description.

ARCHITECT AND BUILDING NEWS. *Vol. CXLVII. 1936. 24 July. P. 110.*

Ruislip "lido." Bathing pavilion, by T. H. Mawson & Son [*F.*].

BUILDER. *Vol. CLI. 1936. 24 July. P. 154.*

Open-air swimming bath, Peterborough.

SPORTS BUILDINGS

ARCHITECTURAL RECORD. *Vol. LXXX. 1936. P. 13.*

"Clearance solids" for recreation buildings. Article on sizes for covered tennis, badminton, squash and basket ball courts, ice hockey, swimming baths, billiards.

ARCHITETTURA (ROME). *Vol. XV. 1936. June. P. 245.*

Casa del Balilla at Como, by Mantero, includes stadium and swimming bath.

REVISTA DE ARQUITECTURA (BUENOS AIRES). *Vol. XXII. 1936. P. 226.*

Yacht Club, Concordia, Argentina; built on piles elevated above shore, piles submerged at high tide.

COMMERCIAL BUILDINGS AND OFFICES

ARKITEKTEN (HELSINGFORS). *1936. No. 5. P. 68.*

Finnish Savings Bank at Kotka; *also* head office of Nordiska Föreningbanken, Helsingfors.

ARCHITECTURE ILLUSTRATED. *1936. July. P. 3.*

Office building for Bristol Aeroplane Co., Filton, Bristol, by Austen Hall [*F.*].

CONSTRUCTION MODERNE (PARIS). *Vol. LI. 1936. 26 July. P. 874.*

"Le Palacio de la Madeleine," a large office building in Paris, by Marcel Hennequet.

ARCHITECTURAL FORUM. *Vol. LXV. 1936. July. P. 21.*

Hedrich-Blessing studio. Studio for advertisement photographer, includes offices and full photographic laboratory.

AIRPORTS

ANNALES DE L'INSTITUT TECHNIQUE (PARIS). *Vol. I. 1936. No. 3. P. 22.*
Aeroplane hangar construction; technical article on hangar with 70 metres clear span opening.
This bi-monthly journal issued by the Inst. Tech. du Batiment et des Travaux Publics of Paris is now regularly received by the library.

INDUSTRIAL BUILDINGS

DESIGN AND CONSTRUCTION. *Vol. VI. 1936. July.*
Bakelite factory, Birmingham; new office block by G. B. Cox [*F.*].

HOSPITALS, ETC.

ARCHITECTURE ET URBANISME (BRUSSELS). *Vol. LVI. 1936. P. 13.*
Sanatoria; general article on planning. Useful reference.
BUILDER. *Vol. CLI. 1936. 24 July. P. 168.*
The future of the Isolation Hospital; paper read to R. San. Inst. by W. H. Hobday [*F.*]. Illustrated by plans.
ARCHITECT AND BUILDING NEWS. *Vol. CXLVII. 1936. 17 July. P. 79.*
Maternity and child welfare centre, Horsham, by F. G. Troup [*F.*].
ARCHITECTURE ET URBANISME (BRUSSELS). *Vol. LVI. 1936. P. 3.*
Hospital St. Pierre, Brussels, by J.-B. Dewin. Large central urban multi-floored general hospital on "spinal" plan.
ARCHITECTS' JOURNAL. *Vol. LXXXIV. 1936. 23 July. P. 113.*
Welwyn Cottage Hospital, Herts, by H. G. Cherry [*F.*], Adams, Holding & Pearson, consulting architects. Two ten-bed wards, also children's ward and private rooms.
ARCHITECT AND BUILDING NEWS. *Vol. CXLVII. 1936. 24 July. P. 101.*
Barratt Maternity Home, Northampton, by Sir John Brown and A. E. Henson [*F./L.*].

THEATRES AND CINEMAS

ARCHITECT AND BUILDING NEWS. *Vol. CXLVII. 1936. 17 July. P. 75.*
Peoples Theatre, Oslo. By C. von Munthe av Morgenstein and Arne Eide.
ARCHITETTURA (ROME). *Vol. XV. 1936. June. P. 269.*
Cinema Acoustics. A general technical article. Useful reference.
ANNALES DE L'INSTITUT TECHNIQUE (PARIS). *Vol. I. 1936. No. 3. P. 33.*
Air conditioning of the Comédie Française Theatre, Paris.

ASSEMBLY HALLS, ETC.

BUILDER. *Vol. CLI. 1936. 17 July. P. 105.*
The People's Palace, Mile End Road, London, by Campbell Jones, Sons and Smithers [*F.*] and G. R. Coles [*F.*]. Large theatre, restaurant and lecture hall.
ARCHITECTS' JOURNAL. *Vol. LXXXIV. 1936. 16 July.*
Besant Hall, Rodmaston Mews, London, by A. L. Osborne. Seats 450 on floor and gallery.

CHURCHES

ARCHITECTURE ILLUSTRATED. *1936. July. P. 3.*
St. James's Church, Cowley, near Oxford, by T. Lawrence Dale [*F.*], includes large hall about 80 ft. by 28 ft., a chapel which can be opened up into the large hall, two smaller halls and kitchen, etc.
CONSTRUCTION MODERNE. *Vol. LI. 1936. P. 850.*
St. Louis Church, Marseille-baulieu, by J. Sourdeau, remarkable concrete building.
BUILDING. *Vol. XI. No. 7. July. P. 301.*
Comparative plans of churches.

DOMESTIC

BUILDER. *Vol. CLI. 1936. 24 July. P. 152.*
ARCHITECT AND BUILDING NEWS. *Vol. CXLVII. 1936. 31 July. P. 141.*
"Brightwells" working-class flats, Clancarty Road, Fulham, by Jocelyn F. Abram [*L.*], for Fulham Housing Improvement Society, 30 flats.
ARCHITECT AND BUILDING NEWS. *Vol. CXLVII. 1936. 24 July. P. 105.*
Seaside flats near Copenhagen, by Arne Jacobson. An interesting scheme planned with flats in *échelon* to give best insolation.
ARCHITECTURAL FORUM. *Vol. LXV. 1936. July. P. 47.*
Small house and flat planning; analysis of plan features and requirements.

MATERIALS AND CONSTRUCTION

ARCHITECTURAL RECORD. *Vol. LXXX. 1936. P. 67.*
New designs by a pioneer prefabricator; useful reference.
BAUGILDE (BERLIN). *Vol. XVIII. 1936. 5 July.*
Illustrated article on German thatching.
AMERICAN ARCHITECT AND ARCHITECTURE. *Vol. CXLIX. 1936. July. P. 47.*
Brick: article on better construction in brick, by H. V. Walsh; a useful reference.

HOTELS

DESIGN AND CONSTRUCTION. *Vol. VI. 1936. July.*
Royal Oak Hotel, Liverpool, by H. E. Davies & Son [*F./A.*], large openly planned inn.
ARCHITECTURAL RECORD. *Vol. LXXX. 1936. P. 43.*
Atlantis Hotel, Miami, by L. M. Dixon.

BUILDING SCIENCE

EPOQUE (BRUSSELS). *3rd Series. No. 2. 1936. P. 217.*
Building Acoustics: paper by Fr. Raymond dealing with the subject generally. Illustrated.

DECORATION

ARCHITECTURAL RECORD. *Vol. LXXX. 1936. July. P. 57.*
Mural Photography: short article on methods of using photos as decoration.

TOWN PLANNING

TOWN PLANNING REVIEW. *Vol. XVII. No. 1. 1936. June.*
Amsterdam: article describing the general extension plans.

GENERAL

BOUWBEDRIJF (THE HAGUE). *Vol. XIII. 1936. 24 July. P. 145.*
Modern Architecture in Paris. About 150 small photos of recent Paris buildings. A useful index.
ARCHITEKT S.I.A. (Journal of the Architects of Czechoslovakia).
This is now received regularly by the library.

We regret that owing to great pressure on space it has been impossible to include Book Reviews and Accessions to the Library in this number of the JOURNAL.

THE SIXTEENTH ANNUAL MEETING OF THE FRANCO-BRITISH UNION OF ARCHITECTS

22 to 26 JULY

According to custom, whereby the annual meetings of the Franco-British Union of Architects take place alternately in Great Britain and France, this year's assembly was held in Scotland, with Edinburgh as its centre.

Dinner at R.I.B.A.

Since many who wished to take part could not spare the time to go to Edinburgh, an informal dinner was held on Tuesday, 21 July, at the R.I.B.A., at which the visiting members, their families and friends were the guests of the British section. This proved to be a thoroughly successful introduction to the congress.

The Journey to Scotland

Next morning the visiting members, accompanied by the Secretary-General, made an early start by motor coach on the first stage of their journey to Edinburgh. Surprise at the extent of London was their first comment, to be followed, when the Great West Road was reached, by admiration for the "English Homes" (which would have surprised our English colleagues) and the general air of tidiness and propriety. Then came a host of questions as we passed through Runnymede, Windsor and Eton, gradually fading out into interested observation of the countryside until Oxford was reached. Here a short halt for refreshment was made before the journey was continued to Stratford-on-Avon, where Mr. and Mrs. Lanchester, Mr. A. J. Davis, Mr. Duncan Lee and Mr. C. E. Bateman joined the party for lunch. An hour or two was spent in the town in seeing the church and the outside of the Memorial Theatre before proceeding to Lichfield, where another halt was made to see the cathedral and take a cup of tea. Chester was reached just before sunset, and after a few anxious moments (due to last-minute bookings and cancellations in accommodation) a hasty meal was taken and our indefatigable visitors spent some hours in the town. Two things delighted them—the way in which the famous "Rows" had been contrived, and the way in which the character of the town had been preserved in more modern buildings.

Next morning the weather broke and the rain descended so as to give little hope of seeing the beauties of Lakeland. Our route lay along the Wirral Peninsula as far as Birkenhead, and then through the Mersey Tunnel to Liverpool. The tunnel was much admired, and what was especially commented upon was the success of this collaboration between architect and civil engineer. The next feature of interest was the picturesque old town and castle of Lancaster, until, in cloud, mist and rain, we reached Ambleside for lunch. From this point the weather gradually improved, and the mist and hurrying clouds, casting alternate patches of shadow and pale sunlight on the lakes and hills, revealed something of the strange charm of this part of Cumberland. Here and in the hills beyond the Border our guests were struck by the vivid green of the pasture land, but presently what was to be a brief halt was made at Gretna Green. The famous smithy aroused so much interest that we spent nearly an hour there before proceeding onwards to Moffat, where the sun was shining and a real Scotch tea was waiting. The last part of our drive over the Pentland Hills to the Devil's Beef Tub was a glorious pageant of cloud and hills, lit up in gorgeous tints of golden light and purple shadows. Finally Edinburgh was reached at about 9.30 p.m., just as the sun was setting.

Next morning, Friday, the 24th, members visited the castle and the Scottish war memorial in the Thistle Chapel, and were welcomed by the Lord Provost at City Chambers, before reassembling at the Caledonian Hotel, where the whole party was entertained to luncheon by the Royal Incorporation of Architects in Scotland. This cheery and informal function preceded the sixteenth annual general meeting, which was held at the rooms of the R.I.A.S.

Sixteenth Annual General Meeting

There were present: M. Maurice Gras (President), in the chair, M. Bertrand, M. Boutterin, Lieut.-Col. H. P. Cart de Lafontaine (Sec.-Gen.), M. Chedanne, M. Henri Defrasse, Mr. H. M. Fletcher, Hon. Sec. R.I.B.A. (Chairman, British section), M. Formery, Mr. H. V. Lanchester (Vice-President), M. Mollet, Mr. B. N. H. Orphoot, Mr. A. N. Paterson, M. Pontremoli, M. Remaury, M. Ravazé, M. Schneider (Hon. Secretary, French section) and M. Tournon. Visitors: Mr. G. C. Soutar (President, R.I.A.S.) and Mr. J. T. Middleton, W.S. (Secretary, R.I.A.S.).

After formal business, members stood for a few moments in a silent tribute to the memory of King George V. The President then referred to the further loss which the Union had suffered by the death of Monsieur Albert Louvet, one of their founders and first President, and members again stood for a few moments in silence.

The Secretary-General then gave a brief report on the work of the past session, and referred to the progress made in the scheme for co-operation with the League of Nations for the better regulation of international competitions and to this year's competition between students of the Ecole des Beaux Arts and of British schools of architecture.

This was supplemented by a report of the work of the French section by Monsieur Schneider.

On the proposition of the President, Mr. H. V. Lanchester was unanimously elected President for the session 1936-37. Mr. Lanchester, having taken the chair and briefly thanked the members for the honour conferred upon him, proposed Monsieur A. Tournaire as Vice-President. Monsieur Tournaire was also unanimously elected.

The Secretary-General (in the unavoidable absence of Mr. H. Chalton Bradshaw, Hon. Secretary, British section),

proposed the following French architects, each of whom was duly elected as an ordinary member of the Union : Monsieur J. Gréber (Architect-in-Chief, Paris International Exhibition, 1937), Monsieur G. Chedanne, Monsieur P. Marozeau, Monsieur Patrice Bonnet, Monsieur Yves Hémar.

The question of exhibitions to be held in Paris and London was next discussed. The Secretary-General reported it was proposed that an exhibition of the recent works of British architects should be held in Paris during the International Exhibition of 1937, that it was also proposed to arrange exhibitions of the work of students of the Ecole des Beaux Arts at the R.I.B.A. and of work done in the British schools of architecture at the Ecole des Beaux Arts during the coming session. These proposals were adopted, and were referred to the French and British sections for study and appropriate action.

The Secretary-General reported that he had been in communication with Monsieur A. Tur on the subject of a proposed exhibition of photographs of his works in the reconstruction of State and municipal buildings on the island of Martinique. It was decided that in the case of " one man shows " the Union should not take any action except that of giving such assistance as might be required in the initial stage.

It was agreed that the next annual meeting should be held in France during the International Exhibition in Paris in 1937, but that it would be better to select a meeting-place outside the city, such as Versailles or Fontainebleau. The question was referred to the two committees of the Bureau for further consideration and the preparation of a detailed programme. The proceedings terminated with votes of thanks to the two Scottish societies for their cordial welcome and for their assistance in arranging the programme of excursions, and to the Royal Incorporation of Architects in Scotland for the use of their rooms for the annual meeting.

The formal business having been disposed of, members and their guests proceeded by motor-coach to visit Hopetoun House (by kind permission of the Marquess of Linlithgow), where Mr. Mears, who is at present in charge of restoration works at the house, acted as guide. A brief halt was made on the way to view the Forth Bridge.

The Annual Dinner

Later in the evening the annual dinner of the Union was held at the Caledonian Station Hotel, when, in addition to members and their friends, the following were present as guests of the Union : The Lord Provost and Mrs. Gumley, Mr. Pirie (President of the Royal Scottish Academy) and Mrs. Pirie, Mr. G. C. Soutar and Miss M. Soutar, Professor and Mrs. Sarolea and Mr. J. T. Middleton, W.S., Secretary of the Royal Incorporation of Architects in Scotland.

After dinner, and the toast of " The King and the President of the French Republic " having been duly honoured, Mr. H. M. Fletcher proposed " The City of Edinburgh," and expressed our thanks to the Lord Provost and our Scottish hosts. The Lord Provost, in his reply, welcomed the members of the Union and, referring to the many ties which united France and Scotland, mentioned that he was a Vice-President of the Franco-Scottish Society.

Monsieur Gras proposed the toast of " The Royal Incorporation of Architects in Scotland and the Edinburgh Architectural Association," and expressed the appreciation of the visiting members for the cordial welcome which they had received from their English and Scottish colleagues, which they hoped to reciprocate when the Union met in France next year.

Mr. G. C. Soutar replied in a brief and witty speech on behalf of both societies, and the proceedings terminated with the toast of " The Franco-British Union of Architects," proposed in French and English by Mr. Pirie, and responded to by Mr. H. V. Lanchester.

Excursion to Dryburgh and Melrose

Next day, Saturday, 25 July, there was an all-day excursion to Dryburgh Abbey, Melrose Abbey and Abbotsford House, and in the evening members and their friends were the guests of the Edinburgh Architectural Association at the galleries of the Royal Scottish Academy. And so ended a profitable and thoroughly enjoyable meeting.

H. P. C. de L.

Correspondence

B.S.I. ASBESTOS TILES AND SHEETS SPECIFICATION

87 Buckingham Palace Road,
London, S.W.1.
28.7.36

To the Editor, JOURNAL R.I.B.A.

DEAR SIR,—Among other specifications of interest to the architect one is important in respect of the bearing it has on a material of growing importance, about which architects at present know very little. I refer to asbestos tiles and sheets, a specification, No. 690-1936, of which is now issued.

Even now the B.S.I. are unable to deal with the composition nor are the tests exhaustive and convincing, but the specification contains valuable information and guidance and has an appendix of suggestions governing the practical usage of the material.

I may be forgiven if once more I call the attention of members of the Institute to the Standard Specifications now issued, numbering about 200, and covering pretty nearly every important material used in building construction. A list of these can be obtained from the British Standards Institute, 28 Victoria Street, S.W.1, and the whole series can be inspected in our library. They are exceedingly informative and are great labour-savers for the architect in writing his specification.

Yours faithfully,

PERCIVAL M. FRASER [*F.*]

Notes

PRESIDENT'S ENGAGEMENTS

Mr. Stanley Hamp attended a reception at Grosvenor House on 15 July given by the London Master Builders' Association and represented the President.

APPOINTMENTS VACANT

Director of the Trades Training School, Great Titchfield Street, London

On his election as Master of the Carpenters' Company, Sir Banister Fletcher relinquishes the position of Director of the Trades Training School, Great Titchfield Street, which he has held since 1916.

The Court of the Carpenters' Company wish to notify this vacancy to members of the Royal Institute. The position carries with it an honorarium of £250 per annum. Any members who wish to apply should communicate with the Clerk to the Company, Throgmorton Avenue, London, E.C.2. before 30 September.

Assistant Lecturer in the Welsh School of Architecture, Cardiff

Required, as soon as possible, Assistant Lecturer in the Welsh School of Architecture. (Head of Department, W. S. Purchon, M.A. [*F.*].

Preference will be given to Associates of the R.I.B.A. who have passed successfully through a full course of instruction in a " recognised " School of Architecture. Ability in design and draughtsmanship and sound knowledge of construction, both applied and theoretical, are essential ; professional and teaching experience desirable. Burnham Scale.

Application forms and further particulars are obtainable from W. J. Williams, Director of Education, City Hall, Cardiff, to whom applications must be returned on or before 21 August.

University of Cape Town
Chair of Architecture

Applications are invited for the Chair of Architecture recently established. The salary is £1,000 per annum, rising by biennial increments of £50 to £1,100 per annum. The Professor must become a member of the University Teachers' Superannuation Fund.

Appointments are generally restricted to candidates under 35 years of age, but in the case of a candidate who has been engaged in teaching or in research in South Africa this restriction need not apply. Applications (six copies) must reach the Secretary to the High Commissioner for the Union of South Africa, Trafalgar Square, London (from whom further particulars may be obtained) not later than 15 September 1936. Applicants, in addition to submitting copies of testimonials, must give the names of three referees.

The Professor will be expected to assume duty on 1 March 1937, or as soon as possible thereafter ; salary will be paid from 1 February 1937, if he has vacated his previous post on or before 31 January 1937, and reports for duty on or before 25 February 1937 ; otherwise salary will be paid from date of assumption of duty.

VISIT TO THE FOREST PRODUCTS RESEARCH LABORATORY

A joint visit of members of the Architectural Association, the Timber Development Association and the R.I.B.A. to the Forest Products Research Laboratory at Princes Risborough, near Aylesbury, Bucks, has been arranged to take place on Thursday, 24 September, in the afternoon.

A fast train leaves Paddington Station at 1.27 p.m. and cheap day return tickets are available at 4s. 5d. (third class). Those travelling by train will assemble outside Princes Risborough Station at 2.40 p.m., and it is hoped that members travelling by car and able to take a passenger or passengers will meet the party there.

All members are invited to take part in the visit and to bring friends.

No tickets are required for the visit, but those intending to take part are particularly requested to inform the Hon. Secretary of the Science Standing Committee (at the R.I.B.A.), by not later than Thursday, 17 September, in order to facilitate the necessary arrangements at the Research Laboratory.

TOWN PLANNING INSTITUTE

Meeting at Norwich

The eighteenth annual country meeting will be held at Norwich from 2 to 4 October 1936 inclusive under the chairmanship of the President of the Institute, Mr. Ernest G. Allen [*F.*]. The meeting will open on Friday afternoon, 2 October, which will enable members to travel to Norwich on the morning of that day.

The Lord Mayor of Norwich (Councillor Walter A. Riley) will extend an official welcome to the delegates ; matters of town and country planning interest will be discussed ; and visits will be made to places of interest.

A detailed programme will be issued in due course. Hotel accommodation can be arranged if early application is made to the Secretary, 11 Arundel Street, Strand, W.C.2. Special terms have been arranged at the Maid's Head and Royal hotels at 10s. 6d. per person for bed, bath and breakfast. Delegates will pay their own hotel bills. The meeting is not confined to members of the Institute only—friends are invited.

ROYAL SOCIETY OF BRITISH SCULPTORS

The Royal Society of British Sculptors have awarded their medal " for the Best Work of the year by a British Sculptor in any way exhibited to the public in London " to Mr. Charles L. Hartwell, R.A., F.R.B.S., for his statue of St. George on the Marylebone War Memorial, in the centre of the new roundabout at the junction of St. John's Wood Road and Wellington Road, N.W.8.

CORRECTION

We regret that in the article on the Old School at Cambridge in the last JOURNAL the name of Mr. F. P. Morton, who was responsible for wood-carving and certain furniture, was incorrectly given as Martin.

Obituaries

PROFESSOR HANS POELZIG [*Hon. A.*]

The death has occurred in Berlin of Professor Hans Poelzig, of the Academy for Arts and the Technical High School in Berlin, and one of the most outstanding German architects. Since last year, when he was placed first in the international competition for an academy of music and a theatre in Istambul, he decided to transfer all his activities from Germany to Turkey. The Turkish Government commissioned him with all the public works directed by the Ministry for Public Instruction and offered him a professorship at the new School of Architecture at Ancara. At the age of 65 Poelzig left his country for this new and arduous task in a land that was new to him and whose climate may have been one of the reasons for the untimely end of his vigorous and productive life. But there was no scope for his genius in the new Traditionalism of the German Dictatorship and he preferred the hardship of a new beginning to an enforced idleness in Germany. Only a fortnight before he died he signed the working drawings for the new theatre in Istambul, his first and last work in the new country.

Poelzig was born in 1869, he studied in Berlin, and after some years of private practice and teaching was called to be the head of the Breslau School of Architecture in 1903. From 1916 to 1920 he was architect to the city of Dresden and in 1920 he was given a master studio in the Prussian Academy of Arts, an honour only accorded to the best of each art. Since his death this place has not yet been filled. Since 1924 he was Professor in Berlin.

Hans Poelzig was both a great architect and a great teacher, but for all those who had the privilege of knowing him more intimately he was an inspiring and lovable personality for whom they felt admiration and loyalty. His assistants and students used to call him " der Meister " (the Master), and he certainly was like one of the great mediæval master builders, simple, vigorous, heavy rather than clever of mind, sometimes of phantastic invention, but never coarse, never easy-going either, nor ever affected even when he seemed most pathetic. He was hostile both to any romanticism and to constructionalism for its own sake. In his later years construction and material were so self-evidently treated by him that they did not form a problem for him at all. He used bricks, stone, steel and concrete, each by itself or combined, and made them serve rather than master his ends. Honesty was essential in every one of the designs he asked his students to do, and nothing would pass that worked well, even looked well, but lacked that sort o fmusicality that was the mark of his own work, whether it was a clever piece of constructional acrobatic or a theatrical invention without simplicity.

His own buildings had great influence on the ormation of the " continental style." All books on modern architecture will contain his factory for chemical products in Lubau (1910), the office building in Breslau, a reinforced concrete building (1912), the theatres Grosses Schauspielhaus (Berlin 1919), Capitol (Berlin 1925), Cinema Breslau, and the Berlin Broadcasting building (1930). These are just a few of the great number of buildings, industrial, public, domestic, for which he has been responsible. Professor Poelzig has done pioneering work with almost every one of his designs because he was never easily satisfied with his work. Looking back on his life, he might well have said of himself, like Goethe did, " dass er es sich habe sauer werden lassen "—that he had not spared himself but laboured hard.

School Notes

LIVERPOOL SCHOOL OF ARCHITECTURE

Annual Exhibition of Students' Work and The Second Summer School

On the first of July, at the same moment that Mr. Salvador Dali, muffled in a diver's suit and led by a pair of Irish wolfhounds, staggered on to the platform at the New Burlington Galleries in London to deliver a lecture on *Authentic Paranoiac Phantoms*, Mr. Gerald Barry, prior to opening the exhibition of students' work, was addressing a large gathering in the Lecture Hall of the Liverpool School of Architecture on the subject of authentic architectural vision.

The two addresses, and the exhibitions which they were designed to explain, although precisely contemporary in point of time, could hardly have been further apart in subject or intention ; the one deliberate in its pursuit of reason and realism, the other disregarding rational limits in its effort to lay bare the subconscious influences that tend to make even attempted realism a mockery. And this prompts some curious reflections on the state of society that cultivates such divergent growths in its art and its architecture. One is reminded of the Gothic chantries in Twekesbury Abbey, where the carved figures of departed warriors lie on their resting places of stone with all the outward

semblance of architectural repose and dignity ; while below, through a grating, one can glimpse the grinning skeleton, the snake, the rat, and the symbols of corruption. It is as though architecture and surrealism were the positive and negative aspects of contemporary art, the first creative and objective, the last satirical and destructive. There is, of course, a point of view common to them both, namely, that in order to create one must destroy. And the student, after five years in a school of architecture, has these twin passions for creation and destruction very strongly developed. Beyond this there is no resemblance, for he knows that the breaking down is only a prelude to a rebuilding.

The exhibition at Liverpool gave a useful indication of the forms this rebuilding might take. The theses presented by the fifth year students—over forty of them—are nearly all idealistic. But they are all practicable, they are properly sited, they are worked out in all the details of design, construction, materials, and equipment, and they represent in every single case a real solution to a real and contemporary programme. They are also effectively presented, each being a complete work in itself, comprising programme and report, site, design, and working drawings. To these some have added a model, the most useful form of presentation that is possible. It is doubtful if one could find anywhere a more informative account of the kind of environment that would be created if the new architects of 1936 had the planning of it. The most various problems have been studied, from the housing for a new satellite town to the wind tunnels of an aircraft factory, from the layout of an experimental farm in Ireland to a sanatorium in Kurdistan. Town and country planning, housing, public buildings, hospitals, factories, schools, shops, and buildings for sport and pleasure are all included.

Mr. Gerald Barry, in his opening address, referred to the possible extension of architectural employment in the future.

"Half the problems of our modern life," he said, "seem to be touched at some point or another by the claims of architecture, and half the problems of architecture, at least, by the claims of our social life. We build new houses by the million and are astonished at the end of it to discover that nobody is satisfied because housing has hardly ever been studied as the comprehensive one it is, covering an enormous range and variety of inter-related considerations—accommodation, site, economic rent, public services, geographical position in relation to the occupation of the inhabitants, transport, recreational facilities, population optima, health services.

New tasks occasioned by the new mobility and communal activities of the human animal are being created and successfully tackled by architects—such things as the planning of airports, sports centres exhibition grounds, service stations, and the very lay-out and decoration of our streets, but more education of the public is required before we can hope that the importance of good design in such things will be generally appreciated. The public has yet to understand that the permanent litter of bad building is worse than the litter of orange-peel and ice-cream cartons because it lasts longer, and, even when jerry-built, better withstands the ravages of the English climate ; and this will remain true even though we demolish and rebuild our towns every twenty or thirty years, as I dare say in the future we shall."

While the exhibition was still on view, and after the present students had gone down, the school was invaded by past students who had come up for the Summer School. This project was inaugurated last year, and proved so successful that it was repeated, and will probably be continued in the future. The attendance this year was not large, but it was astonishingly representative. Members came from Aberdeen, Belfast, Birmingham, Cardiff, Chester, Dundee, Durham, Huddersfield, Hull, London, Manchester, Newcastle, many parts of North Wales, and all parts of Merseyside. The programme combined lectures, discussions and visits to places of interest, with social events of various kinds ; so that there were many pleasant social occasions for renewing old acquaintanceship, as well as for exchanging more professional experiences. The subjects of the lectures were chosen for their practical value to the architect in practice. Mr. E. H. Boulton, of the Timber Development Association, led off with a talk on building timber, tree planting, and the particular uses of various woods.

Mr. D. E. E. Gibson, of the Building Research Station, dealt with the problem of the flat roof.

Mr. Geoffrey Pilkington talked about and exhibited samples of the interesting material which he manufactures, namely, glass.

Mr. Eugen Kauffmann, recently appointed director of research to the Housing Centre, introduced an entirely new subject, *Neighbourhood Units as Elements in Town Planning*. It proved to be a most valuable contribution to existing ideas, and deserves reproduction in full. The last lecturer was Mr. R. A. Manthei, of the Considère Construction Company, who gave a very able review of pioneer developments in contemporary structural engineering.

The Mersey Docks and Harbour Board very generously conducted the Summer School over those parts of their vast dock estate which were of any architectural interest. The Summer School also toured round the village of Port Sunlight and was shown the factory and the model kitchens at the works. One evening was spent at a reception given by Professor and Mrs. Budden at their house in Falkner Square ; another at the theatre. The final meeting took place on Saturday morning, 11 July.

THE ARCHITECTURAL ASSOCIATION SCHOOL

Annual Exhibition of Students' Work

The annual prize-giving at the A.A. School was held on Friday, 17 July, when Mr. L. H. Bucknell, the President, was in the chair, and Viscount Esher, M.B.E., Hon.A.R.I.B.A., distributed the prizes. In his opening address Mr. Bucknell referred to the appointment of Mr. H. S. Goodhart-Rendel as director of the school, with Mr. Rowse as principal. He referred also to the activity of the students in starting two clubs, an Art Club and a Sailing Club, both of which promised to be very flourishing organisations. In his address Lord Esher said that the students were fortunate in their generation because England was going to be rebuilt. Everything, he suggested, that had been built in England between 1840 and 1914 could well be destroyed. The students

all had their vision of what England might be—a country of clean, white factories, schools of light and air, with swimming pools and gymnasia, houses a pleasure to the poor—a brave new world which the students of to-day could build. But their architecture was an art, not a trade, and as an art was a matter of individual emotion. The canons of architecture could not be confined within the ideology of political creeds, art was not a lay figure for a political theory; it, and architecture as a part of it, must be individual, because it was not an idea but an emotion aroused by creative imagination.

Mr. Goodhart-Rendel, in his speech of thanks to Lord Esher, described the school's educational system in some detail. This was also described in an excellent small pamphlet which was published as a guide to the exhibition of work. The five years are now dispersed into fifteen "units," with about seventeen students in each. The object is to make entry into the school and the teaching more flexible, and particularly to bring the teachers and taught into closer touch. It was always a reproach against the old year system that it gave no chances for real cultural intimacy between the students and staff, to their mutual disadvantage. The system is still in an experimental stage, and the authorities are watching the results carefully. Mr. Goodhart-Rendel says in an article in the booklet: "The objects sought by this experiment are flexibility and a relation more intimate between teacher and taught than has been possible hitherto. Of the attainment of these objects it is still too early to speak, but results so far have been encouraging."

In the same article Mr. Goodhart-Rendel says of the general business of a school.

"In the art of architecture education can never be more than what that word exactly means, it can never be more than the bringing out in the student of what is there already. It can teach the student how to express and make marketable his inventions, but it cannot teach him what to invent. It can also teach him how to provide appropriately and quickly what the world needs from him in its daily life, and this perhaps is its chief obligation. Young men and women come to a training school mostly with the intention of learning how to make a living, and the school would be acting dishonourably by them if it allowed any other aim, however laudable in itself, to make them less capable than they might be of self-support."

Because it represents the first fruits of the new system the exhibition of work is of even greater interest than usual. The work has evidence in it that the students are entering into the experiment keenly.

Membership Lists

ELECTION OF MEMBERS
20 JULY 1936

In accordance with the terms of Bye-laws 10 and 11, the following candidates for membership were elected at the Council Meeting held on Monday, 20 July 1936.

AS FELLOWS (10)

DEMPSTER : JOHN AUSTIN [*A.* 1921].

FOX : CHARLES WILLIAM [*A.* 1925].

SHEARER : THOMAS SMITH [*A.* 1920].

And the following Licentiates who have passed the qualifying examination :—

AITKEN : HENRY ANDREW.

ALDRIDGE : VERNON, Ventnor, Isle of Wight.

HENSON : CHARLES ARTHUR EDWARD, Northampton.

MENDIS : AHANGAMA BADUGEY, A.R.C.A.(Lond.), Ceylon.

PEARSON : ERNEST WALTER, Bournemouth.

And the following Licentiates who are qualified under Section IV, Clause 4 (c) (ii) of the Supplemental Charter of 1925 :—

TOOMER : ALBERT JOHN, Taunton.

WEALD : GEORGE.

AS ASSOCIATES (18)

CADBURY-BROWN : HENRY THOMAS [Passed five years' course at the Architectural Association. Exempted from Final Examination].

CLAY : GEORGE INGLIS [Passed five years' course at the Architectural Association. Exempted from Final Examination].

COLLINS : ARTHUR CHARLES, Dip.Arch.Design(Melb.), Tite Prizeman [Passed the qualifying Examination of the Royal Australian Institute of Architects. Member of the Royal Australian Institute of Architects and of the Royal Victorian Institute of Architects].

COSTELLO : FRANK GIBSON [Foundation Member of the Roya Australian Institute of Architects. Diploma, Sydney Technical College].

HARKNESS : JOHN CAM, A.A.Dip. [Passed five years' course at the Architectural Association. Exempted from Final Examination].

HIRST : PHILIP EDWIN DEAN [Passed five years' course at the Liverpool School of Architecture, University of Liverpool. Exempted from Final Examination], Liverpool.

HOLT : JOHN [Passed five years' course at the Armstrong College School of Architecture (University of Durham), Newcastle-upon-Tyne. Exempted from Final Examination], Chester-le-Street, Co. Durham.

HURD : SAMUEL JAMES [Foundation Member of the Royal Australian Institute of Architects. Passed the qualifying Examination of the Institute of Architects of New South Wales in 1921], Dublin, I.F.S.

JOHNSON : WILLIAM FREDERICK [Passed five years' course at the Birmingham School of Architecture. Exempted from Final Examination], Coventry.

NOBLE : JOHN BAILLIE [Passed five years' course at the School of Architecture, Robert Gordon's Colleges, Aberdeen. Exempted from Final Examination].

PRASAD : VISHWA NATH, Dip.Arch.Edin. [Passed five years' course at the School of Architecture, Edinburgh College of Art. Exempted from Final Examination], Edinburgh.

SERGENT : WILLIAM HENRY [Passed five years' course at the Liverpool School of Architecture, University of Liverpool. Exempted from Final Examination], Southport.

SHEPPARD : RICHARD HERBERT [Passed five years' joint course at the R.W.A. School of Architecture, Bristol, and the Architectural Association. Exempted from Final Examination].

SPREULL : DAVID WILSON, Dip.Arch.(Liverpool) [Passed five years' course at the Liverpool School of Architecture, University of Liverpool. Exempted from Final Examination], Dundee, Scotland.

THOMAS : ARTHUR SELWYN [Passed five years' course at the Welsh School of Architecture, The Technical College, Cardiff. Exempted from Final Examination].

THORNELY : MICHAEL ERIC [Passed five years' course at the Architectural Association. Exempted from Final Examination], Liverpool.

TODD : WEMYSS WYLTON [Associate Member of the Royal Australian Institute of Architects. Admitted as an Associate of the South Australian Institute of Architects by examination in 1928].

WILLS : MISS DOROTHY MARY [Passed five years' course at the School of Architecture, University College, Auckland, New Zealand. Exempted from Final Examination], Tauranga, New Zealand.

AS LICENTIATES (7)

CLARIDGE : GEORGE JAMES ROBINSON.

COPSON : PERCY GEORGE, Northampton.

GALE : JACK ELFSTROM.

HARRISON : THOMAS WINDER, Ashford, Kent.

LOWE : JOHN COTTRELL.

ROBERTS : IVAN FREDERICK.

WILSON : STEPHEN GRYLLS, M.A., Oxford.

APPLICATIONS FOR MEMBERSHIP

ELECTION : 19 OCTOBER 1936

In accordance with the terms of Bye-laws 10 and 11, an election of candidates for membership will take place at the Council Meeting to be held on Monday, 19 October 1936. The names and addresses of the candidates, with the names of their proposers, found by the Council to be eligible and qualified in accordance with the Charter and Bye-laws are herewith published for the information of members. Notice of any objection or any other communication respecting them must be sent to the Secretary R.I.B.A. not later than Tuesday, 18 August 1936.

AS HON. CORRESPONDING MEMBER (1).

EINHORN : ALEXANDER, Professor of Town Planning ; Manager of Architectural Studio, Institute of Town Planning of Ukraine Republic (Kharkov) ; Vice-Chairman, Kharkov Union of Soviet Architects. Home of Specialists, 2 Radialny Street, Kharkov, U.S.S.R. Proposed by the Council.

AS FELLOWS (7).

ALEXANDER : THOMAS MACKELVIE, F.S.I. [*A.* 1923], 8 Harrington Street, Liverpool, 2 ; "Craigie," 14 Chalfont Road, Allerton, Liverpool, 18. Proposed by T. E. Eccles, Gilbert Fraser and Edgar Quiggin.

HALFHIDE : FREDERICK WILLIAM [*A.* 1921], 293 Regent Street, W.1 ; Hilborough, Kingswood Warren, Tadworth, Surrey. Proposed by R. John O'Donoghue, Geoffrey C. Wilson and Maxwell Ayrton.

MEREDITH : JOHN NELSON [*A.* 1919], Municipal Offices, Norwich ; 5 Branksome Close, Eaton, Norwich. Proposed by Sir Arnold Thornely, H. L. Thornely and L. H. Keay.

ST. LEGER : MAJOR CHARLES DOUGLAS, M.C. [*A.* 1920], Romney House, Marsham Street, S.W.1 ; 8 Gray's Inn Square, W.C.1. Proposed by Sir Herbert Baker, F. Winton Newman and Alex. T. Scott.

SCARLETT : FRANK, B.A. Lond. [*A.* 1927], 5 Raymond Buildings, Gray's Inn, W.C. ; 38 Downshire Hill, N.W.3. Proposed by Ernest B. Glanfield, Brian L. Sutcliffe and C. Lovett Gill.

SCOTT-WILLEY : HUGH HENRY [*A.* 1910], 2 Mitre Court Chambers, Temple, E.C.4 ; "Homewood," Chipstead, Surrey. Proposed by G. Blair Imrie, H. Edmund Mathews and P. D. Hepworth.

And the following Licentiate who has passed the qualifying Examination :

NICHOLSON : ARTHUR THOMAS, Assistant County Architect, Lancashire County Council, County Offices, Preston ; 41 West Cliff, Preston. Proposed by S. Wilkinson, T. Taliesin Rees and Gilbert Fraser.

AS ASSOCIATES (21).

BARRELL : STANLEY FRANCIS [Passed five years' course at the Bartlett School of Architecture, University of London. Exempted from Final Examination], Ash Close, Petts Wood, Orpington, Kent. Proposed by L. Stuart Stanley, H. O. Corfiato and Matthew J. Dawson.

BELTON : THOMAS ALFRED LEVERTON [Passed five years' course at the Department of Architecture, University of Sheffield. Exempted from Final Examination], 16 Hawton Crescent, Wollaton Park, Nottingham. Proposed by Stephen Welsh, Major T. Cecil Howitt and F. W. C. Gregory.

CARR : HEDLEY NORMAN [Passed a qualifying Examination approved by the Board of Architectural Education of the Royal Australian Institute of Architects], 98 Spit Road, Mosman, N.S.W., Australia. Proposed by Arthur Wm. Anderson, Henry E. Budden and Professor Leslie Wilkinson.

FLOWER : GERALD WANKLYN [Passed five years' course at the Architectural Association. Exempted from Final Examination], 2 Gloucester Terrace, W.2. Proposed by Howard Robertson, Sir E. Guy Dawber and L. H. Bucknell.

HAYTHORNTHWAITE : GERALD GRAHAM, Dip.Arch.(Mancr.) [Passed five years' course at the School of Architecture, Victoria University, Manchester. Exempted from Final Examination], Endcliffe Vale House, Sheffield. Proposed by Ernest J. Pomeroy, J. Mansfield Jenkinson and Harry B. S. Gibbs.

HEATH : FRANK NORMAN [Member of the Royal Australian Institute of Architects. Qualified by completing their Examination], 422 Collins Street, Melbourne. Proposed by Leighton Irwin, Leslie M. Perrott and Roy K. Stevenson.

HINCHCLIFFE : MISS KATHLEEN MAY [Passed five years' course at the Liverpool School of Architecture, University of Liverpool. Exempted from Final Examination], "Ewhurst Place," Storeton Road, Oxton, Birkenhead. Proposed by Professor Lionel B. Budden, Edward R. F. Cole and Bertram Ashworth.

HOWELLS : BERTRAM THOMAS, B.Arch.Hons.L'pool. [Passed five years' course at the Liverpool School of Architecture, University of Liverpool. Exempted from Final Examination], 20 Heydale Road, Mossley Hill, Liverpool, S.18. Proposed by Professor Lionel B. Budden, J. E. Marshall and Edward R. F. Cole.

KIRBY : REGINALD ALEC [Passed five years' course at the Architectural Association. Exempted from Final Examination], 7 Fraser House, Albion Road, Larkhall, S.W.8. Proposed by W. Godfrey Allen, Wallace Marchment and C. S. White.

LAMBERT : LESLIE CHARLES [Member of the Institute of South African Architects. Passed the R.I.B.A. Special Final Examination conducted by the University of the Witwatersrand], 313 Frere Road, Durban, South Africa. Proposed by Wallace Paton, Ernest M. Powers and Godfrey T. Hurst.

LAWSON : RICHARD DONALD [Passed five years' course at the School of Architecture, Victoria University, Manchester. Exempted from Final Examination], 322 Oldfield Lane, Altrincham, Cheshire. Proposed by Professor R. A. Cordingley, W. A. Johnson and Gerald Sanville.

LINES-ROBERTS : MISS DENISE MARION [Passed five years' course at the Architectural Association. Exempted from Final Examination], Eulinya, Park Hill, Bickley, Kent. Proposed by A. B. Knapp-Fisher, H. A. Gold and G. Grey Wornum.

MURRAY : ALEXANDER HAMMETT [Passed the Examinations at the University of the Witwatersrand equivalent to the R.I.B.A. Intermediate and Final Examinations], Johannesburg, Transvaal, South Africa. Proposed by Robert Howden, S. C. Dowsett and Gordon Leith.

POOLE : MAURICE MELVILLE FORBES [Passed Examinations at the University of the Witwatersrand equivalent to the R.I.B.A.

Intermediate and Final Examinations], 10 Lamont Road, Durban, South Africa. Proposed by Ernest M. Powers, G. T. Hurst and Wallace Paton.

ROGERS : ALAN EDGAR, B.A.(Arch.) [Passed five years' course at the Bartlett School of Architecture, University of London. Exempted from Final Examination], Courts Cottage, Petworth Road, Haslemere, Surrey. Proposed by Professor A. E. Richardson, L. Stuart Stanley and Matthew J. Dawson.

SHAPLEY : RONALD STUART [Passed five years' course at the Leeds School of Architecture. Exempted from Final Examination], Roman Way, Alwoodley Lane, Leeds. Proposed by H. L. Thornely, Sir Arnold Thornely and Major Clough Williams-Ellis.

SMALLEY : ERNEST ALFRED [Final], 3 Ramsbottom Street, Accrington. Proposed by Sam. Taylor, William H. Harrison and Walter Stirrup.

TAYLOR : GEORGE LESLIE [Passed five years' course at the Leeds School of Architecture. Exempted from Final Examination], 23 Torrington Square, W.C.1. Proposed by H. V. Lanchester and T. A. Lodge and applying for nomination by the Council under the provisions of Bye-law 3 (d).

WEEGMANN : HENRY CHRISTIAN [Final], "The Elders," Bramhope, Nr. Leeds, Yorks. Proposed by John C. Procter, G. H. Foggitt and B. R. Gribbon.

WILKINSON : FRANK [Passed five years' course at the Leeds School of Architecture. Exempted from Final Examination], 25 Braithwaite Street, Staincross, Barnsley. Proposed by Thos. H. Johnson, Victor Bain and F. L. Charlton.

WILLIAMS : ARTHUR LLEWELYN, B.Arch. [Passed five years' course at the Liverpool School of Architecture, University of Liverpool. Exempted from Final Examination], Ysgoldy, Nantlle, Pen-y-Groes, Caernarvonshire. Proposed by Professor Patrick Abercrombie, Professor Lionel B. Budden and F. Charles Saxon.

AS LICENTIATES (6)

BUCKLEY : FREDERICK LEWIN, 13 Westcliff Drive, Leigh-on-Sea, Essex ; 9 Dale Road, Leigh-on-Sea. Proposed by Major D. H. Burles, Percy R. Fincher and Percy G. Hayward.

CROSS : WALTER EDWARD, 52 Heston Road, Hounslow, Middlesex. Applying for nomination by the Council under the provisions of Bye-law 3 (d).

HARLING : GEORGE, Borough Engineer's Department, Town Hall, Burnley ; 20 Gainsborough Avenue, Burnley. Proposed by Saml. Taylor and applying for nomination by the Council under the provisions of Bye-law 3 (d).

MANSER : HAROLD ALFRED, 152 Terminus Road, Eastbourne, Sussex. Proposed by John D. Clarke and the President and Hon. Secretary of the South-Eastern Society of Architects under the provisions of Bye-law 3 (a).

MELLOR : RICHARD FRANCIS MOUNTFORD, County Architect's Office, Springfield, Maidstone, Kent ; 28 St. Luke's Road, Maidstone. Proposed by Hubert M. Fairweather, Robert W. Pite and W. H. Robinson.

NISBETT : DUDLEY, D.S.O., M.C., 81 Dale Street, Liverpool, 2 ; 11 Princes Park Mansions, Liverpool, 8. Proposed by B. M. Ward (President) and Lt.-Col. Ernest Gee (Past President) on behalf of the Liverpool Architectural Society.

ELECTION OF STUDENTS R.I.B.A.

The following were elected as Students R.I.B.A. at the meeting of the Council held on 6 July 1936 :—

BIGGAR : GORDON BUCHANAN, 40 Riverside Road, Glasgow, S.3.

BILIMORIA : JEHANGIR PHIROZE, 5 New Queen's Road, Bombay.

FIRSHMAN : HARRY, 480 Bethnal Green Road, London, E.2.

HENDERSON : JOHN EVERSDON, 16 Thirlestane Lane, Edinburgh.

MACDONALD : DONALD JAMES, c/o Mrs. McHattie, 87 Westburn Road, Aberdeen.

MACGRUER : JOHN GEORGE, c/o Lewis, 54 Church Road, Richmond, Surrey.

MISTRI : (Miss) PERIN JAMSHEDJI, Baimai Manzil, Nepean Sea Road, Bombay.

PORRI : LOUIS ADRIAN, The House Beyond, Farnham Common, Bucks.

RICHARDS : JOHN MELVILLE, Windmill House, Windmill Lane, Belper, Derbyshire.

SIBBALD : JAMES, 5 Osborne Place, Dundee.

VARMA : INDRA CHAND G., 45 Krishna Niwas, Kalbadevi, Bombay, 2.

WATSON : ALEXANDER FREDERICK, 13 Fitzjohns Avenue, Hampstead, N.W.3.

WEARING : JOHN KEEVIL, 4 Eaton Road, Norwich.

The following were elected as Students R.I.B.A. at the meeting of the Council held on 20 July 1936.

ALAWAY : KENNETH HARRY MERVIL, 5 Sunnyside, Colney Hatch Lane, Muswell Hill, N.10.

BALAPORIA : SHIAVAX RATTANSHAW, Jer Baug C. Block, No. 15, Byculla, Bombay, India.

BALL : WILLIAM KENNETH, 23 Trevor Road, Worsley Road, Swinton, Nr. Manchester.

BARROWS : RALPH, 8 Tennyson Street, Mansfield.

BAY : PETER LAURITZ HANSEN, 90 Hereford Road, London, W.2.

BEARD : PHILIP, 455 Foleshill Road, Coventry.

BEE : PHILIP RAYMOND, 110 Hurst Street, Oxford.

BELL : JOHN THORNTON, 18 Queens Terrace, Otley, Yorks.

BELLAMY : ALBERT ALEXANDER, 85 Union Road, London, S.W.4.

BESWICK : ROBERT EDWARD EASTCOTT, 58 Bath Road, Swindon.

BIDMEAD : GEORGE REGINALD, 244 Stoney Lane, Sparkhill, Birmingham, 11.

BOARD : ROBERT WILLETT VYVYAN, 34 Aigburth Drive, Liverpool.

BRAGG : STANLEY EDWARD, 180 Springfield Road, Chelmsford, Essex.

BROWN : BERTRAM GOULD, 97 Maldon Road, Colchester.

BULBECK : ROBERT SPENCER, Belvoir, Telegraph Road, Westend, Hants.

BUSHELL : PHILIP EDWARD, 73 Perne Road, Cambridge.

CAHILL : EDWARD A., 480 Gt. Cheetham Street, Higher Broughton, Salford.

CAKE : RONALD HENRY, 28 Harold Road, Southsea, Hants.

CAUSON : ALBERT HENRY, 316 Bordesley Green East, Stechford, Birmingham, 9.

CHANDLER : ERNEST WILLIAM, Flat 3, 21 Commercial Buildings, Jersey.

CHAPPELL : DENIS, 12 Magdalen Road, North End, Portsmouth.

CHIVERS : THOMAS ARTHUR, 32 Llanfair Road, Cardiff.

COLLINS : DOUGLAS GEORGE, 24 Somerset Place, Stoke, Plymouth.

COOK : PERCY ALAN DENIS, 21 Hillside, Harlesden, N.W.10.

COOKE : PETER EDWARD, Holfords Farm, Winchelsea, Sussex.

CUNNINGHAM : JOHN JOSEPH, 143 Rutland Drive, Morden, Surrey.

DATE : PATRICK, Ewell Cottage, Eastwick Drive, Gt. Bookham, Surrey.

DEAN : ROBERT ALEXANDER, 4 Vicars Hill, Armagh, Northern Ireland.

DIMMOCH : WILLIAM HERBERT, Claremont, Edward Road, Farnham, Surrey.

DOBSON : GRAEME GIBSON, Foswell View, Auchterarder, Perthshire.

DOUGLASS : ALBERT, 88 Pierrepont Road, West Bridgford, Nottingham.

ELLIOTT : RAYMOND FOSTER, "Edgeley," Cobham Road, Leatherhead, Surrey.

FAIRBAIRN : GEORGE WILLIAM, 1 Copplestone Road, Budleigh Salterton, Devon.

FAIRWEATHER : GEOFFREY HUBERT, Crossways, Oakhill Road, Sevenoaks, Kent.

FARMS : KENNETH WILLIAM, "Kingsdown," 43 Clifton Road, Wallington, Surrey.

FEESEY : JOSEPH JACK, 63 Westcliff Park Drive, Westcliff-on-Sea, Essex.

FERGUSON : WALTER KEITH, 7 Somerset Road, London, N.W.4.

FOWLER : CHARLES HILL, 24 Egerton Road, Bournemouth.

FREARSON : ARTHUR, 55 Westmount Road, Eltham, S.E.9.

FULLER : ALAN RICHARD, "Newlyn," Southover, Lewes.

GALE : THOMAS WILSON, 18 Ridgdale Street, Grove Hall Park, E.3.

GIFFIN : CHRISTOPHER CHARLES MICHAEL, 45 South View, Letchworth, Herts.
GOLDFINCH : DONALD ALBERT, 11 Dublin Crescent, Westbury-on-Trym, Bristol.
GRAY : RONALD PETER, 6 Brookfield Road, London, E.9.
GRIFFIN : GEORGE ROBERT EDWARD, 93 Winchester Road, St. Margarets, Twickenham.
HADDY : JOSEPH ALAN, 148 Seaview Road, Wallasey, Cheshire.
HALL : FREDERICK EDWARD, 63 Brackenbury Road, Moor Park, Preston, Lancs.
HALL : HARRY DESMOND, 60 Totteridge Road, High Wycombe, Bucks.
HARRINGTON : DOUGLAS WILLIAM, 31 Craven Street, Strand, W.C.2.
HARRIS : MAURICE HENRY, 2 Park Street, Foleshill, Coventry.
HAYES : TERENCE BENJAMIN, 12 Halcyon Road, North Prospect, Plymouth.
HITCH : HAROLD JOHN, 98 Minard Road, Catford, S.E.6.
HOBBIS : CHARLES IREDALE, Flat 4, 37 Rosslyn Hill, N.W.3.
HOLDEN : JOHN CHARLES, 34 Greyfriars Crescent, Cadley, Preston.
HOSKINS : GEORGE ROBERT STEWART, Brecon Villa, Grange Mount Avenue, Heswall, Wirral.
HUTCHINSON : EDWARD OSWALD, 148A The Crescent, Arden Park, Bredbury, Stockport, Cheshire.
JONES : CLIFFORD HARDING, 18 Wheelers Lane, King's Heath, Birmingham, 14.
KING : THOMAS EDWARD JAMES, 12 Richmond Road, Exeter.
LANE : ARTHUR LEWIS, 71 Campbell Road, London, E.3.
LANE : ERNEST GEORGES, "The Pines," Becontree Heath, Dagenham, Essex.
LAWRENCE : FREDERICK, 26 Christchurch Road, Bournemouth, Hants.
LAWRENCE : WALTER WILLIAM, 16 Kilmartin Road, Goodmayes, Essex.
LIGHTOWLERS : CYRIL VARLEY, Beaufort House, Brook Lane, Golcar, Nr. Huddersfield.
LOVEGROVE : CYRIL ERNEST, 4 Wallands Crescent, Lewes.
LOWE : BERNARD SIDNEY, 77 Norfolk Road, Erdington, Birmingham.
LOWE : CECIL WILLIAM, 198 Elmhurst Mansions, Edgeley Road, London, S.W.4.
MAUDSLEY : JOHN ALAN, 41 Dundonald Road, Brondesbury Park, N.W.10.
MEADOWS : ROBERT RAGLAND, 64 Anlaby Park Road N., Hull, Yorks.
MITCHELL : NORMAN BRAKE, "Windyridge," Off Fields Road, Haslington, Crewe, Cheshire.
MOORE : DOUGLAS DAVID, 4 Roseville Avenue, Harrogate.
MORGAN : GEOFFREY WILLIAM, 96 Thornbury Road, Osterley, Middlesex.
OTTON : FRANK CHARLES, 17 Colborne Way, Worcester Park, Surrey.
PAGE : GEORGE GAZE, 9 Eldon Avenue, Shirley, Croydon, Surrey.
PARSONS : ROLAND WILLIAM BRITTAN, 24 Priory Road, High Wycombe.
PINE : ARTHUR TATTERSALL, 109 Louisville Road, Balham, S.W.17.
PLUMSTEAD : DEREK WARD, 23 Burcott Road, Purley.
POLLITT : ERIC, 29 Harridge Avenue, Stalybridge, Cheshire.
POTTER : FRED, "Broadlands," Middleton Road, Bromsgrove, Worcs.
POWELL : PATRICK THOMAS, 1A Argyll Street, Coventry.
PRICE : ERIC JOHN, 43 Bradwell Lane, Porthill, Stoke-on-Trent.
REED : RICHARD ERNEST, 18 Disraeli Road, Forest Gate, E.7.
RICHMOND : FRANK GAYTON, 121 Kenton Road, Kenton, Middlesex.
RYDER : WILLIAM WALTER, 146, Romford Road, Stratford, E.15.
SALISBURY : GEORGE, 28 Lynton Road, Hillside, Southport, Lancs.
SAUNDERS : KENNETH HERBERT, 3 Myrtle Terrace, Lancing, Sussex.
SIMPSON : JOHN WILLIAM, 42 Noel Road, Acton, W.3.
SLACK : JOSEPH, "Bretby," 213 Nottingham Road, Mansfield.
STAFFORD : ROBERT HENRY PARKER, "Barndale," Grantham Road, Waddington, Lincoln.
STEVENS : GEORGE EDGAR, 40 Silverdale Road, Birmingham.
STRONG : ALFRED JOHN, "Ta-Ku," Southcliff Park, Clacton-on-Sea.
TAPNER : BENJAMIN CHARLES, 88 Chester Terrace, Brighton, 6, Sussex.
TOCHER : WILLIAM ROME, "Falconcliff," Royal Crescent, Dunoon.
TOOLEY : CHARLES EDWARD, 61 Reginald Terrace, Leeds, 7.
TURNBULL : (Miss) ANNIE NICOL, 71 Nile Grove, Edinburgh, 10.
UPRIGHT : MALCOLM, 9 Park Terrace, Tunstall, Stoke-on-Trent.
WALTER : JOHN FELIX, 9 Horbury Mews, London, W.11.
WATSON : DOUGLAS HAROLD ROY, 104 Sackville Road, Hove, Sussex.
WAUGH : ERIC, 9 Freetrade Street, Rochdale, Lancs.
WEBSTER : LEWIS EDWARD, 38 Culverley Road, Catford, S.E.6.
WHITE : (Miss) JOYCE ELIZABETH, 11 Cumberland Road, Southport.
WHITTAKER : HAROLD, 37 Barcroft Road, Smithills, Bolton, Lancs.
WILKINSON : WILLIAM CURRINGTON, c/o Mrs. Dukes, 82 Springfield Road, New Southgate, N.11.
WILLIAMS : IVAN, 60 St. Philip's Avenue, Penn Fields, Wolverhampton.
WILLIAMS : JOHN LESLIE MAXWELL, Ironbrook, South Darley, Matlock, Derbyshire.
WILLIAMSON : HERBERT LEONARD, 80 Harvist Road, Kensal Rise, N.W.6.
WILLS : CLIFFORD GORDON, "Highfield," Woodside Avenue, North Finchley, N.12.
WILSON : IAN BURNS, 15 Hawthorn Road, Wallington, Surrey.

Notices

EXHIBITION OF DESIGNS SUBMITTED IN COMPETITION FOR THE NEW PARLIAMENT HOUSE, SALISBURY, SOUTHERN RHODESIA

In the competition held recently for the new Parliament House, Salisbury, Southern Rhodesia, the Assessor, Mr. J. R. Adamson [*F.*], awarded the first premium to Mr. E. Berry Webber [*A.*]. The designs submitted in the competition will be on exhibition in the Henry L. Florence Hall and the Reception Room at 66 Portland Place from Monday, 10 August to Thursday, 20 August, inclusive, between the hours of 10 a.m. and 5 p.m. (Saturday, 10 a.m. and 1 p.m.).

THE R.I.B.A. KALENDAR 1936-37

The attention of members is drawn to the leaflet enclosed with the issue of the JOURNAL for 27 June. Changes of address, etc., for inclusion in the forthcoming issue of the *Kalendar* must be notified to the Secretary R.I.B.A. BEFORE SATURDAY, 22 AUGUST.

REVISION OF THE R.I.B.A. REGULATIONS GOVERNING THE PROMOTION AND CONDUCT OF ARCHITECTURAL COMPETITIONS

The Council have approved a recommendation of the Competitions Committee that the paragraphs in Clause 1 of the R.I.B.A. Regulations governing the Promotion and Conduct of Architectural Competitions dealing with the question of the Assessor's fee should be amended to read as follows :—

> The usual R.I.B.A. Scale of Charges for Assessing Competitions is the sum of 25 guineas, plus one-fifth of 1 per cent. upon the estimated cost of the proposed building, i.e., £2 per £1,000 on the estimated cost.
>
> The foregoing Scale is exclusive of travelling and other out-of-pocket expenses, which are to be charged in addition.

In the event of more than one Assessor being appointed, the remuneration shall be decided by mutual arrangement between the Assessors and the Promoters.

In accordance with Bye-law 38, the Council give notice that this amendment will be confirmed by them at their meeting on 19 October 1936, subject to consideration of any comments or criticisms which may be received from members. Such comments or criticisms should, in accordance with the above mentioned Bye-law, be submitted within fourteen days of the date of issue of this Journal.

DELIVERY OF PRICED BILLS OF QUANTITIES WITH TENDERS

At a recent meeting of the Joint Committee of London Architects and Builders, the increasing practice of asking for priced Bills of Quantities to be delivered with tenders for private work was discussed.

The prices inserted in the Bills of Quantities are the private property of the builders tendering, and until it is decided to accept one of the tenders there is no necessity for disclosure of such private information. It can serve no purpose for an architect or quantity surveyor to receive eleven builders' priced bills when only the twelfth is to be considered.

The Council are in agreement with the architect members of the Joint Committee of London Architects and Builders and the Practice Standing Committee in deprecating this growing practice. They advise members to confine the request for disclosure of the priced bills of quantities to the builder whose tender is to be considered.

BUILDING SURVEYING EXAMINATIONS

The R.I.B.A. Statutory Examination qualifying for candidature as District Surveyor in London and the R.I.B.A. Examination qualifying for candidature as Building Surveyor under Local Authorities will be held at the R.I.B.A. on 7, 8 and 9 October 1936. Applications for admission to the examinations must be received not later than 16 September 1936.

OVERSEAS APPOINTMENTS

When members are contemplating applying for appointments overseas they are recommended to communicate with the Secretary R.I.B.A., who will supply them with any available information respecting conditions of employment, cost of living, climatic conditions, etc.

CESSATION OF MEMBERSHIP

Under the provisions of Bye-law 21 the following have ceased to be members of the Royal Institute :—

As Associates.

William John Delbridge.
Rolfe Gilbert Booth.

As Licentiate

John Armstrong.

Competitions

The Council and Competitions Committee wish to remind members and members of Allied Societies that it is their duty to refuse to take part in competitions unless the conditions are in conformity with the R.I.B.A. Regulations for the Conduct of Architectural Competitions and have been approved by the Institute.

While, in the case of small limited private competitions, modifications of the R.I.B.A. Regulations may be approved, it is the duty of members who are asked to take part in a limited competition to notify the Secretary of the R.I.B.A. immediately, submitting particulars of the competition. This requirement now forms part of the Code of Professional Practice in which it is ruled that a formal invitation to two or more architects to prepare designs in competition for the same project is deemed a limited competition.

COMPETITION FOR A DESIGN FOR THE RECONSTRUCTION OF THE MAIN ENTRANCE TO SUTTON PARK, SUTTON COLDFIELD

The Competitions Committee desire to call the attention of members to the fact that the conditions of the above competition are not in accordance with the Regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime members should not take part in the competition.

COMPETITION FOR NEW SCHOOL, WORCESTER

The Competitions Committee desire to call the attention of members to the fact that the conditions of the above competition are not in accordance with the regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime members should not take part in the competition.

BARKING : NEW TOWN HALL AND MUNICIPAL BUILDINGS

The Barking Corporation invite architects practising in the United Kingdom to submit in competition designs for a new Town Hall and Municipal Buildings to be erected at a cost not exceeding £160,000.

Assessor : Mr. H. V. Lanchester [*F.*].
Premiums : £500, £250 and a further £200 to be awarded as recommended by the Assessor.
Last day for receiving designs : 14 September 1936.
Last day for questions : 1 May 1936.

BELFAST : NEW WATER OFFICES

The Belfast City and District Water Commissioners are proposing to hold a competition for new Office Buildings and Mr. H. Austen Hall [*F.*] has been appointed to act as Assessor. Conditions are not yet available.

BIRMINGHAM : NEW CENTRAL TECHNICAL COLLEGE, ETC.

The Corporation of the City of Birmingham are to hold a competition for a new Central Technical College, Commercial College and School of Arts and Crafts. Mr. J. R. Adamson [*F.*] has been appointed to act as Assessor and the premiums to be offered will be £750, £500 and £250. Conditions will be issued in the near future.

DARTFORD : NEW MUNICIPAL OFFICES AND ASSEMBLY HALL

The Dartford Town Council invite architects practising in the United Kingdom to submit in competition designs for new Municipal Offices and Assembly Hall.

Assessor : Mr. P. D. Hepworth [*F.*].
Premiums : 200, 100 and 50 guineas.
Last day for receiving designs : 21 August 1936.
Last day for questions : 29 June 1936.

DUNDEE : COLLEGE OF ART

The Dundee Institute of Art and Technology are to hold a competition for the Duncan of Jordanstone College of Art and Mr. J. R. Leathart [*F.*], has been appointed to act as Assessor. Conditions are not yet available.

EDMONTON: NEW TOWN HALL BUILDINGS

The Edmonton Urban District Council are proposing to hold a competition for new Town Hall Buildings, and Mr. E. Berry Webber [*A.*] has been appointed to act as Assessor. No conditions are available yet.

FARNHAM: NEW COUNCIL OFFICES

The Farnham Urban District Council invite architects practising in the United Kingdom to submit in competition designs for new Council Offices.

Assessor: Mr. E. Vincent Harris, A.R.A., O.B.E. [*F.*].
Premiums: £250, £150 and £100.
Last day for receiving designs: 31 October 1936.
Last day for questions: 31 August 1936.

Conditions of the competition may be obtained on application to Mr. A. A. Minns, Clerk of the Council, Council Offices, Farnham, Surrey. Deposit, £1 1s.

HACKNEY: RECONSTRUCTION OF CENTRAL BATHS

The Hackney Borough Council are proposing to hold a competition for the reconstruction of the Central Baths, and Mr. Frederick J. Horth [*F.*] has been nominated to act as Assessor. Conditions are not yet available.

HOLBORN: PUBLIC BATHS AND WASHHOUSES

The Council of the Metropolitan Borough of Holborn are proposing to hold an open competition for the rebuilding of the Public Baths and Washhouses in Broad Street and Endell Street, and the President has nominated Mr. Kenneth M. B. Cross [*F.*] to act as Assessor. Conditions are not yet available.

LEEDS: NEW CENTRAL PUBLIC BATHS

The Corporation of Leeds invite architects of British nationality to submit, in competition, designs for new Central Public Baths.

Assessor: Mr. Kenneth M. B. Cross [*F.*].
Premiums: £350, £200 and £100.
Last day for receiving designs: 29 October 1936.
Last day for questions: 28 September 1936.

Conditions of the competition may be obtained on application to the Town Clerk, Town Hall, Leeds. Deposit £1 1s.

LLANDUDNO: NEW HOSPITAL BUILDINGS

The Committee of the Llandudno and District Hospital invite registered architects of British nationality to submit in competition designs for a new hospital.

Assessor: Mr. R. Norman Mackellar [*F.*].
Premiums: £250, £150 and £75.
Last day for receiving designs: 31 October 1936.
Last day for questions: 28 August 1936.

Conditions of the competition may be obtained on application to the Honorary Secretary, New Hospital Scheme, Town Hall, Llandudno. Deposit £1 1s.

NEWCASTLE-UNDER-LYME: BLOCK OF SHOPS AND OFFICES

The Newcastle-under-Lyme Borough Council invite architects of British nationality to submit in competition designs for a new Block of Shops and Offices to be erected in High Street.

Assessor: Mr. Harry S. Fairhurst [*F.*].
Premiums: £300, £200 and £100.
Last day for submitting designs: 31 October 1936.
Last day for questions: 31 August 1936.

Conditions of the competition may be obtained on application to the Town Clerk, Town Clerk's Office, Newcastle-under-Lyme. Deposit £2 2s.

NEWPORT, MON.: NEW CIVIC CENTRE

The Newport (Mon.) Corporation invite architects of British nationality to submit in competition designs for new Civic Buildings, including Town Hall, Municipal Offices, Law Courts and Police Station.

Assessors: Mr. E. Berry Webber [*A.*].
Mr. C. F. Ward [*F.*].
Premiums: £750, £500, £300 and £200.
Last day for receiving designs: 30 November 1936.
Last day for questions: 1 September 1936.

Conditions of the competition may be obtained on application to Mr. O. Treharne Morgan, Town Clerk, Town Hall, Newport, Mon. Deposit £2 2s.

SOUTH SHIELDS: ASSEMBLY HALL

The South Shields Town Council propose to hold a competition for an Assembly Hall to be erected on a site at the rear of the Town Hall. Mr. Arthur J. Hope [*F.*] has been appointed to act as Assessor. Conditions are not yet available.

SYDNEY, NEW SOUTH WALES: EXTENSION OF ST ANDREW'S CATHEDRAL

The Authority in the Diocese of Sydney of the Church of England invite architects who are British subjects, and members of the Royal Australian Institute of Architects, the Royal Institute of British Architects or the Allied and Associated Societies, to submit, in competition, designs for extension of St. Andrew's Cathedral, George Street, Sydney, and other cathedral buildings.

Assessors: His Grace the Archbishop of Sydney.
Sir Giles Gilbert Scott, R.A. [*F.*].
Mr. Bertrand J. Waterhouse [*F.*].
Premiums: £500, £300 and £200.
Last day for submitting designs (which must be forwarded direct to Sydney): 28 February 1937.
Last day for questions: 11 August 1936.

TIMBER "TOURIST CAMP"

The Timber Development Association, Ltd., are holding a competition for the lay-out and individual design of a group of camp buildings for a holiday camp, in timber.

Assessors: Mr. E. Guy Dawber, R.A., F.S.A. [*F.*].
Mr. G. A. Jellicoe [*F.*].
Mr. G. Langley Taylor [*F.*].
Mr. John Gloag.
Premiums: £150, £50, £25 and three special mention awards of £10 each.
Last day for receiving designs: 26 October 1936.

Conditions may be obtained on application to The Timber Development Association, Ltd., 69-73 Cannon Street, London, E.C.4.

COMPETITION FOR JOINT RAILWAY RECEIVING OFFICES IN LONDON

The four main railway companies (L.N.E.R., L.M.S., G.W.R. and Southern) are proposing to hold a competition for a design for Standard Joint Railway Receiving Offices in

London, and the following have been appointed to act as Assessors: Mr. L. H. Bucknell [*F.*], Mr. C. Grasemann, Mr. W. H. Hamlyn [*F.*], Mr. Charles Holden [*F.*], Vice-President, R.I.B.A. No conditions are available yet.

COMPETITION RESULTS

DONCASTER: NEW GRAMMAR SCHOOL

1. Mr. J. R. Leathart [*F.*] (London).
2. Mr. G. B. Drury [*A.*] of Drury and Reekie [*AA.*] (London)
3. Mr. W. Crabtree [*A.*] (London).

WESTCLIFF-ON-SEA: SWIMMING BATH
WESTCLIFF-ON-SEA HIGH SCHOOLS

1. Mr. A. Stanley Gasson [*A.*] (Leigh-on-Sea).
2. Mr. L. S. Dyer [*A.*] (Westcliff-on-Sea).
3. Mr. H. Ayshford [*L.*] (Thorpe Bay).

Members' Column

Owing to limitation of space, notices in this column are restricted to changes of address, partnerships vacant or wanted, practices for sale or wanted, office accommodation, and appointments vacant. Members are reminded that a column in the Advertisement Section of the Journal is reserved for the advertisements of members seeking appointments in architects' offices. No charge is made for such insertions and the privilege is confined to members who are definitely unemployed.

FOR SALE

THE widow of a late member has a very fine set of drawing instruments and a drawing table in bass wood for sale.—Apply Box No. 2276, c/o Secretary R.I.B.A.

NEW PARTNERSHIP

MR. A. K. TASKER [*F.*] and Mr. F. AUSTIN CHILD [*A.*] have entered into partnership under the style of A. K. Tasker & Austin Child, and the combined practice is being continued at 25 New Bridge Street, Newcastle-on-Tyne, 2.

In order to devote his entire time to the needs of the new partnership Mr. Child has resigned his Lectureship in Architecture at the School of Architecture, Armstrong College, Newcastle.

CHANGES OF ADDRESS

MR. C. YELVERTON DAWBARN, M.A.Cantab., B.Arch. [*A.*], has changed his address to 1 Brunswick Street, Castle Street, Liverpool, 2, Tel. No.: Liverpool Bank 8916, and he would like all trade circulars and catalogues sent to the new address.

MR. F. HOWARD ALLEN, Registered Architect, Surveyor, has removed his offices to Royal Chambers, 45a The Promenade, Cheltenham Spa; trade catalogues, etc., would be appreciated.

ASSISTANT WANTED

A VACANCY occurs for an Assistant Architect in the office of a leading firm of Architects in the Far East. Must be over 22 years of age, well educated, and have had a good architectural training. A three year first contract is offered with first-class passages out and home, and good prospects for a young man with energy, ability and enthusiasm. Apply, giving particulars of education, architectural training and experience to BOX NO. 2876, c/o The Secretary R.I.B.A.

Architects' and Surveyors' Approved Society

ARCHITECTS' ASSISTANTS' INSURANCE FOR THE NATIONAL HEALTH AND PENSIONS ACTS

Architects' Assistants are advised to apply for the prospectus of the Architects' and Surveyors' Approved Society, which may be obtained from the Secretary of the Society, 26 Buckingham Gate, London, S.W.1.

The Society deals with questions of insurability for the National Health and Pensions Acts (for England) under which, in general, those employed at remuneration not exceeding £250 per annum are compulsorily insurable.

In addition to the usual sickness, disablement, and maternity benefits, the Society makes grants towards the cost of dental or optical treatment (including provision of spectacles).

No membership fee is payable beyond the normal Health and Pensions Insurance contribution.

The R.I.B.A. has representatives on the Committee of Management, and insured Assistants joining the Society can rely on prompt and sympathetic settlement of claims.

A.B.S. Insurance Department

PENSION AND FAMILY PROVISION SCHEME FOR ARCHITECTS

This scheme has been formulated by the Insurance Committee of the Architects' Benevolent Society and is available to all members of the R.I.B.A. and its Allied and Associated Societies.

The benefits under the scheme include:—

(1) A Member's Pension, which may be effected for units of £50 per annum, payable monthly and commencing on attainment of the anniversary of entry nearest to age 65. This pension is guaranteed over a minimum period of five years and payable thereafter for the remainder of life.

(2) The Beneficiary's Pension, payable as from the anniversary mentioned in Benefit No. 1, but to the widow (or other nominated beneficiary) if the member dies before age 65. The amount of this pension is adjusted in accordance with the disparity between the ages of the member and his wife.

(3) Family Provision. Under this benefit a payment of £50 yearly is made to the dependent from the date of death of the member prior to age 65 until attainment of the anniversary previously mentioned, after which benefit No. 2 becomes available.

Provision can be made for any number of units (of £50 per annum) up to a maximum of £500 per annum.

Pension benefit only may be secured if desired and the pension commuted for a cash sum.

Members are entitled to claim rebate of Income Tax on their periodical contributions to the scheme both in respect of pension and of family provision benefit.

Full particulars of the scheme will be sent on application to the Secretary, A.B.S. Insurance Department, 66 Portland Place, W.1.

It is desired to point out that the opinions of writers of articles and letters which appear in the R.I.B.A. JOURNAL must be taken as the individual opinions of their authors and not as representative expressions of the Institute.

Members sending remittances by postal order for subscriptions or Institute publications are warned of the necessity of complying with Post Office Regulations with regard to this method of payment. Postal orders should be made payable to the Secretary R.I.B.A., and crossed.

R.I.B.A. JOURNAL

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